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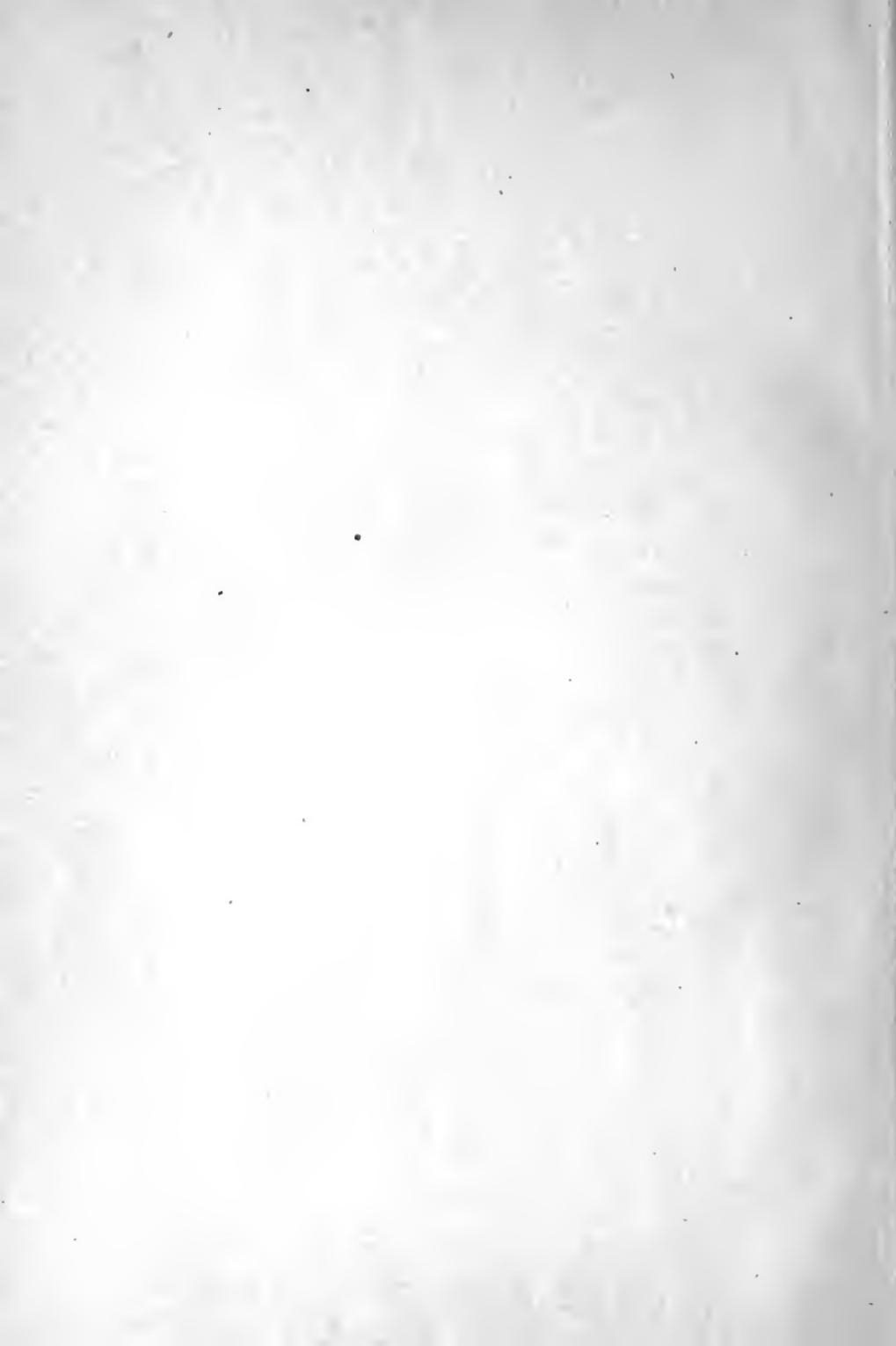
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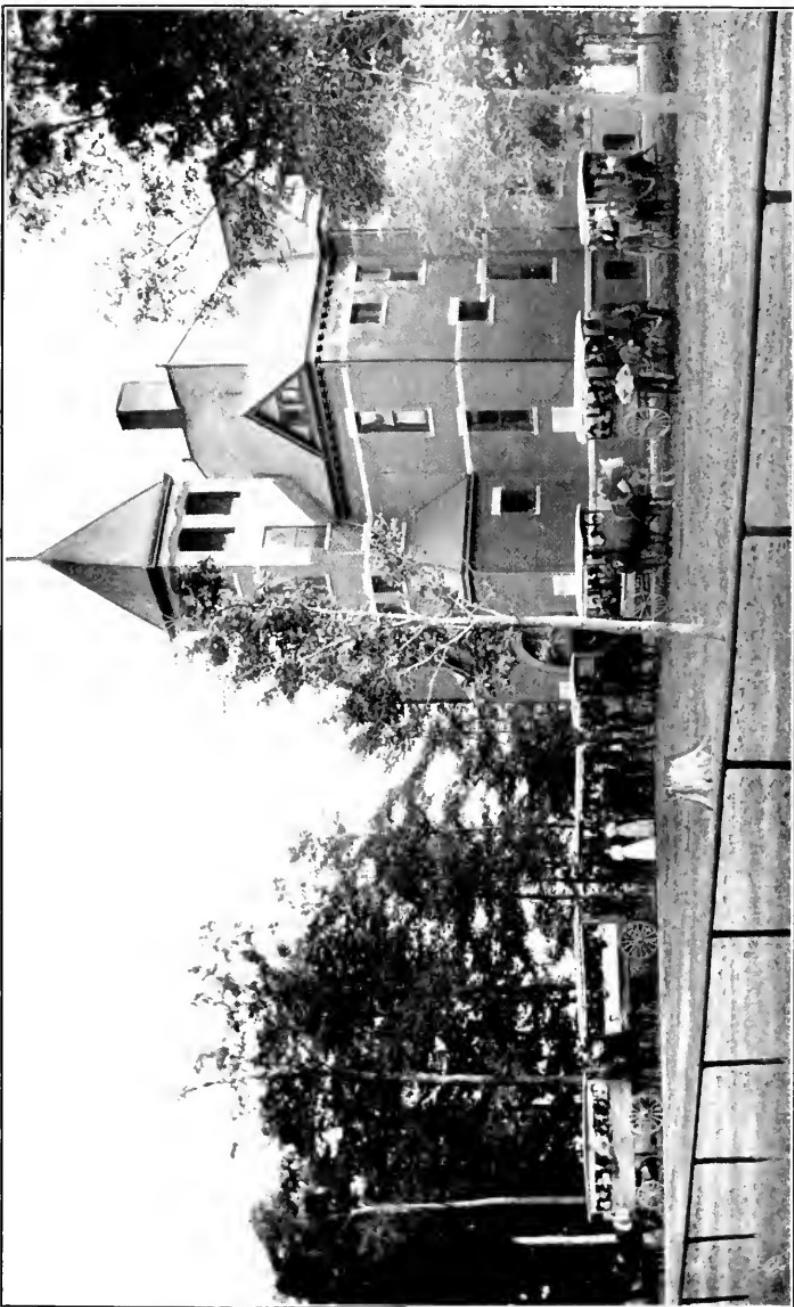






BETTER RURAL SCHOOLS





The consolidated rural school

BETTER RURAL SCHOOLS

By

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THE MIND AND ITS EDUCATION, THE RECITATION, ETC.

and

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SUPERINTENDENT OF SCHOOLS, MONTGOMERY COUNTY, INDIANA

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PREFACE

The rural school presents the most important problem in American education. In it are more than six million children coming from one great industry, agriculture—the most fundamental and important of all industries. Under present conditions this occupation calls for an unusual degree of intelligence and skill. It demands the highest type of business management and industrial ability. And with the success of agriculture is linked the welfare of every American citizen, whatever be his status or vocation.

Yet the rural school, the sole educational opportunity of most of our agricultural population, has been grossly neglected. In the midst of universal progress, it has been allowed to lag behind town and city schools. Abandoned to relative inefficiency, it has failed to hold the loyalty and support of its constituency. The victim of changing social and industrial conditions, it has dwindled in size, diminished in influence, and lost step with the spirit of the times.

But the center of emphasis in education is changing—has changed. The great forces recently set at work to re-organize and vitalize country life have found the condition of the rural school to be one of the chief causes of decay. In it they have also discovered one of the most promising instruments of reclamation and reform. The rural school will come into its own. The great educational agencies of the country—national, state and private—are organizing to give it every help at their com-

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mand. Commercial interests are offering cooperation and support. Legislatures are shaping laws to its advantage and placing increased revenues at its disposal. Best of all, this accession of public interest is stimulating the patrons themselves to desire and demand better schools.

This book is an attempt to interpret the rising tide of interest in the rural school, and to offer whatever help it may in guiding the energy in fruitful lines. It is written especially for rural teachers and administrators in their reading circles, normal schools and study classes. For, while others may plan and project, it is the teachers and their official guides who must finally put these plans and projects into execution. They are the ones who are in immediate contact with the rural school and its problems; they meet pupils and patrons face to face and know their attitudes and modes of thought. And reforms are not carried out by resolutions or legislative decrees, but by individual influence and personal effort.

The book is simply written, that it may be easy and attractive reading. It contains much of illustration, incident and application, that it may be immediately helpful. It touches on such questions as the teacher must daily meet, that it may be practical. It presents many pictures of school conditions, that certain lessons may be doubly enforced. The weaknesses of present rural schools have been frankly exposed, but not for the purpose of mere faultfinding. Criticisms are often sharp, but never in a carping spirit. *The motive of the entire volume is constructive.* Faults are revealed only to show the means by which they may be remedied, and mistakes are condemned only to suggest the way to rectify them.

The scope of the book is broad. It shows how the call for higher efficiency in rural schools is a part of a universal demand upon education. It interprets the rela-

PREFACE

tion of the curriculum to efficiency in education, and shows the reorganization necessary in the rural-school course of study. Because *the teacher* is the central factor in the school, almost one-fourth of the chapters are given over to every-day problems that confront the teacher in the schoolroom. Consolidation is looked upon as the most important single factor in improving rural education, hence this subject is accorded detailed and extensive consideration. The administration of rural schools, including forms of supervision, financial support and social points of contact with the community, is fully treated. *Schoolhouses* and their equipment, the care of school buildings and the preparation and equipment of school playgrounds are discussed. The responsibility of the rural school for the health of its pupils and community is recognized. Finally, the outlook for rural education is examined in the light of present tendencies and opportunities, and the teacher's part defined in the movement for better rural schools.

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BETTER RURAL SCHOOLS

PART I

THE DEMAND FOR BETTER RURAL SCHOOLS

CHAPTER I

THE NEW OUTLOOK

Almost three centuries have passed since the American common-school system had its birth. During all this time the rural school has been an important part of that school system and a significant factor in our country's history.) From the beginning our people have deeply believed in education, and have often sacrificed much to obtain its advantages. When the pioneers have pushed out to occupy new territory, they have never failed to take the school with them. Hardly have the cabin homes been erected before the rural schoolhouse has appeared. Born in the travail of poverty, and nourished not infrequently through sacrifice almost of the very necessities of life, it is no wonder that the rural school has secured such a hold on our affections.

In the early rural school were taught the "three R's" of the older day—the reading, writing and arithmetic that **Early school conditions** constituted the school training of the pioneers. The education received was meager enough, but it served its day. For the life to be met in those times demanded a rugged muscular endurance and the physical daring to be developed in the actual struggle for a livelihood rather than in schools. And few of that generation outside the learned professions possessed

an education extending beyond the simple rudiments obtained in the rural school or the scarcely more advanced schools of the villages. All honor to these hardy pioneers, the fearless men and women who, lacking many of the educational opportunities which their children and grandchildren have had, were still able to lay so deep and sure the foundations of our nation!

The old-time rural school occupied a large place in the social as well as the intellectual life of the entire community. For it was the center of much truly educational activity besides the formal exercises of the school. Here were held the neighborhood spelling schools, attended and enjoyed by old and young for miles around. Here the neighborhood debating society held its fortnightly meetings during the long winter periods, and discussed the great social and political questions that were agitating the young nation. School "exhibitions" afforded opportunity for training the oratorical powers of the ambitious youth who was later to win renown in the legislature or in the halls of congress. The "singing school" was organized for the lovers of music, and the "ciphering" match was held for such as were ambitious to display their mathematical prowess. Here both old and young assembled to the jingling tune of the winter sleigh-bells and, amid song and speech and laughter, joined in a merry time. Here new acquaintances were made, old friendships renewed, courtships begun, and a thousand other advantages attained which are impossible without a common neighborhood meeting-place and social center. The memory of the "little red schoolhouse" will rightly long be cherished among us as one of our dearest possessions from the earlier days.

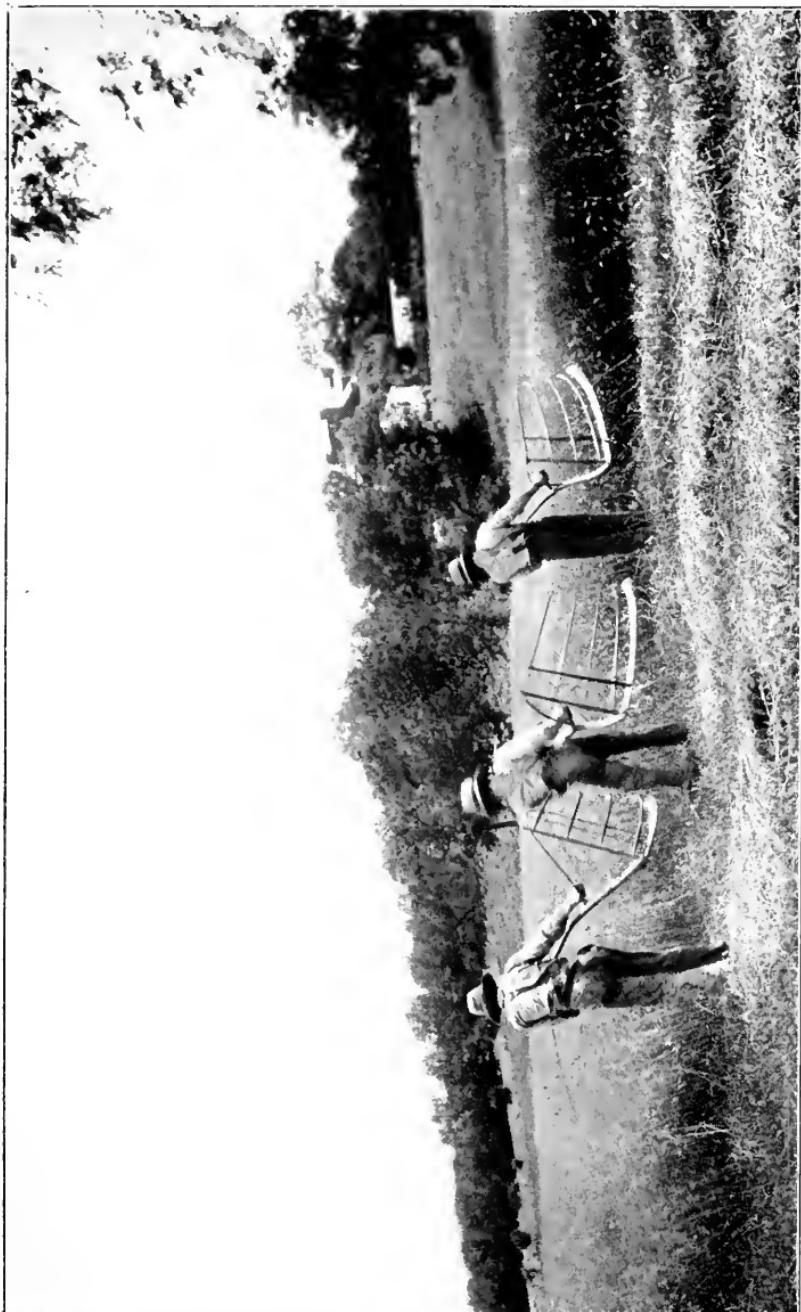
But the age and conditions that gave birth to the old-time rural school have passed away never to return. The **Environment of rural school** had its origin at a time **pioneer schools** when the nation was small and struggling, and when poverty stared almost every family in the face. It grew up while the battle was yet being waged to wrest a living from the untamed forest or the reluctant virgin prairies. The early rural schoolhouse not infrequently looked out on roving bands of Indians bent on no peaceful errands. And its echoes were now and then awakened by the howl of the wolf and the cry of the panther. It was built of logs cut from the near-by forest; its windows were of greased paper, for no glass was to be had. The benches were made of ax-hewn slabs resting on wooden posts, and were innocent of backs. The room was heated by a fireplace occupying the rear of the building. A rough desk and chair for the master, a bunch of quills for the making of pens, and the omnipresent birch within his easy reach completed the equipment of the school. Truly a primitive school, but it belonged to a pioneer day and was a worthy representative of the rugged life of its times.

Since those times, however, our nation has gone through a marvelous social and industrial transformation. The farmer, who, in the earlier days, toiled and sacrificed to send his son to the little district school, himself traveled in the lumbering stage-coach when he made a journey; to-day he rides in his automobile, on the interurban, or on the limited express, enjoying every comfort found in his own home. At that day he broke his ground with a wooden-share plow, planted his corn by hand and cultivated it with a hoe; now, he has the gang-plow, the check-rower

and the riding cultivator. Then, he cut his grain with a cradle and threshed it with a flail; now, he drives the self-binder and has his threshing done by the steam-driven self-feed, automatic-stacker thresher. At that time, his house was built of logs, heated by a fireplace and lighted with tallow candles; to-day, his home is roomy and modern, heated by furnace or steam, well lighted, well furnished and abreast of the times. Then, when the season was not too busy, he could meet and talk with his neighbor perhaps once a fortnight or once a month; now, his telephone connects him not only with all his neighbors, but with all the great world outside. Then, if perchance he found time to go to the post-office, he received a small local paper once a week; now, the daily papers, the farm journals and other magazines are delivered each morning at his door. In those days he had the family Bible and a scant half-dozen other books to read; now, he has a library in his home. Then, the little rural school to which he sent his son would furnish him with an education equal to that possessed by others of his day; but now, such a school leaves him far below the average of present-day education, and not adequately equipped for his life and work on the farm.

It is evident, then, that schools which served the purpose well during the last century will not now suffice. Times have changed. The world is on the move. New standards have arisen, and new demands are in force. We no longer go to war with the old flint-lock or the Springfield, but with an automatic machine that will shoot several times a second for hours without ceasing.

Physicians are yet practising who were able to enter on their professions with no schooling worthy of the name. One such doctor has just died, after thirty years'



The wheat cradle of earlier days

practise of medicine. His sole preparation was a few months' study of veterinary medicine. He found it more profitable to practise on people than horses, and there was no law to prevent. Before he could enter on the practise of medicine to-day he would be required in most states to have four years at high school; and in some states in addition to spend from two to four years in college; and finally three or four years in the medical school. Similar changes have come about in the requirements for law, the ministry and commercial occupations. And the trades and other industrial vocations also demand a correspondingly increased degree of preparation and skill.

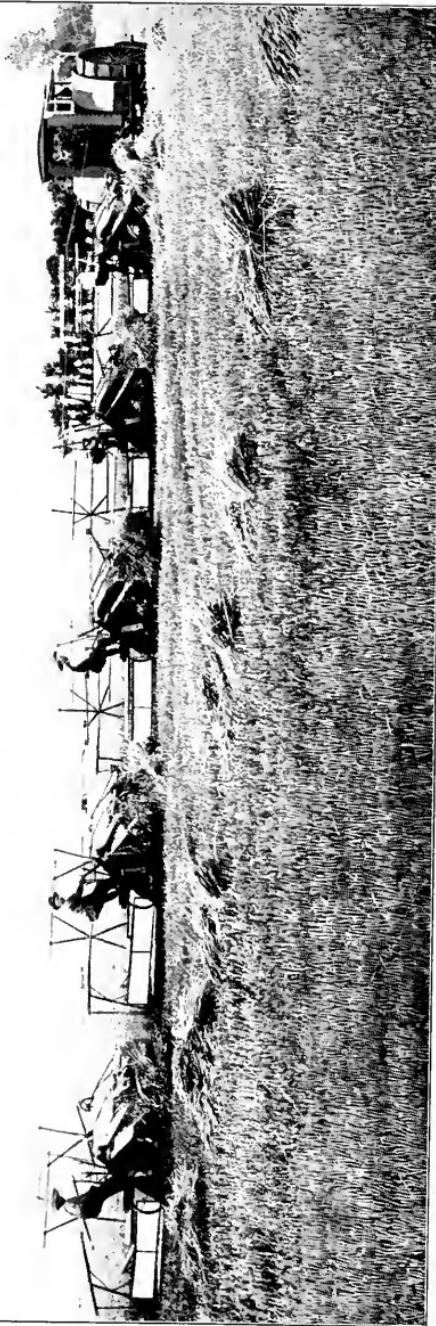
But perhaps the greatest changes of all have come in the field of agriculture. It means much more to be a **New standards in agriculture** farmer now than even a generation ago. The difference is at least as great as in the case of the doctor, the lawyer, or the worker in a technical trade. Land has doubled, trebled, or quadrupled in value, while at the same time losing something of its original productivity. It must therefore be so farmed as to overcome this loss, and return a fair interest or rent on a valuation of from one hundred to two hundred dollars an acre.

The successful farmer must be something of a scientist. He must master the principles underlying the rotation of crops. He must know the nature of the different soils and their adaptability to the various plant products. He must understand the cultivation and growth of the different grains, grasses and vegetables. He must be familiar with the weeds and the insects that prey on his fields. He must have a knowledge of the breeding and the care of stock. He must be a business man, and understand the

markets for his grain and his stock. He should also be a mechanic, and understand the building, draining and other improvements necessary to the farm.

The old type of rural school can not prepare for the problems of the modern farm. It has therefore had its **Farm children's day**. It belongs with the period of **need of education** home-made shoes, the scythe and the stone churn. It is not capable of supplying the education required by the twentieth-century rural boy or girl. They need, and have a right to, a better education than their parents or grandparents had. They require a preparation that will fit them to understand and carry out all the problems of successful present-day farming. They should also have their interests broadened and their minds developed through a knowledge of the world's great literature, its science, its history, its art and its music. Given material surroundings and equipment almost infinitely in advance of those possessed by the former generation, they must also be given the mental training to match, else they will find themselves handicapped in the presence of the new conditions, and will desert the farms for other lines of occupation.

The farmer's school has always been, and should continue to be, the rural school. But it must be a rural school that is abreast with the times, and not one on the level of a former century. It must keep step with the progress that is taking place in other lines, and with the new demands being made on agriculture. It must be able to educate the children of to-day for the farms of to-day. The rural school must be able to offer the farm child as good an education as that available to the town or city child, though this education will of necessity be in part a different education.



The twentieth century reaper at work

Can the rural schools as they average over our country now measure up to the new requirements being placed on them? Have they kept pace with Can the rural school meet its demands? other lines of social and industrial progress? Is the education afforded the farm boy and girl in our present rural schools as much better than that given their parents or grandparents as the present demands on education are greater than the former demands? Is the rural child now receiving *relatively* as good an education as the rural child of the earlier day? Has he provided for him as good an education as the town child receives? Is the rural school as good as the rural community can afford?

It is to be feared that such questions will in the main have to be answered in the negative. It is true that in **Rural and town schools compared** some regions of the country the rural schools have been improved and developed until they now afford at least the rudiments of an excellent education for the children of the farm. But this is the exception rather than the rule. The old type of rural school is altogether too common in most parts of the country. While the town and city schools have been advancing in efficiency, the rural school has in too many cases stood where it was a lifetime ago. The town schools of the present day are generally housed in excellent buildings, planned both for architectural beauty and adaptability to the work of the school. The equipment is modern and efficient. The rooms are well decorated, and made attractive and homelike. Libraries are stocked with books, and laboratories adequately supplied with apparatus and material. The schools are well graded and managed, trained and efficient teachers are employed, and fair salaries paid.

Present status of rural schools

But it is not so in the rural school. Too many rural schools are still sheltered in the pitiful little one-roomed building, ugly in appearance, heated by an unprotected stove in the middle of the room, lighted by opposite rows of shadeless windows, and ventilated hardly at all. The grounds are usually as desolate as the building, covered with unmown grass and weeds, and destitute of shade trees. The interior of the room is often dingy and dirty, the windows and floor are unwashed, and the walls are without decorations. There are but few books, often no apparatus, and not infrequently a shortage of all supplemental supplies necessary to teaching. The school is of necessity poorly classified, since the one teacher has all the grades under her charge. The teacher is usually overworked, often undertaking to hear as many as thirty recitations a day. She has, as a rule, had but little experience, and no special training for her work. Too often she comes from a town or city home with no knowledge of farm life or conditions, and little interest in country boys and girls. Thus the gap between the farm home and the school is still further increased. If the whole truth be told, thousands of our rural schools are not faring as well as they did fifty years ago. For then there were fewer graded schools and high schools to tempt the best teachers away from the district school. Hence a good teacher could often be kept for years in the same rural school; now he is soon called to the town or city, and the rural school must take a young and an inexperienced teacher, or be satisfied with those who remain after the city has had its pick.

Nor is the actual amount of education received by the rural child to-day greatly in advance of that of the

earlier day. Except in the more favored regions it is the exception rather than the rule for children to complete the eight grades of the rural schools. It is much more common for pupils to drop out of school somewhere from the third to the fifth grade, having mastered little more than the "three R's" of the old-time district school. They have learned to read, but have not yet read enough to develop an interest in good reading. They know almost nothing of their country's history, or its form of government. In this age of science, they are ignorant of the great scientific inventions and discoveries. They have learned but little concerning their bodies, and the hygienic laws on which their own health and happiness depend. They have received little or no instruction bearing directly on the work of the farm or the care of the farm home. With splendid powers of mind awaiting development, these powers are allowed to go relatively undeveloped through lack of education. These children are not making the most of themselves.

Visit your old home school of twenty-five or fifty years ago. Too often you will find the same old building, ugly and small and weathered and inhospitable. There you will see the same old battered door whose latch you could then hardly reach; the same rickety and carved desks where you sat with feet not touching the floor; the same cramped and barren room, ceiled with boards painted a dismal drab; the same diminutive patch of blackboard, cracked, uneven and shiny; the same absence of books and apparatus for the school; the same meager and overcrowded program, but now poorly taught by an inexperienced and unprepared girl from a city school. The stumbling recitations, the listless study and the futile waste of precious time and opportunity are

pitifully out of accord with the spirit of efficiency and progress of the present day.

All this is below the standards of our times, and a grave injustice to the children of the farm. These boys

Farm children have a right to better education and girls have a right to as good an education as that given to the children of the towns and cities. *Why*

not? Are they less intelligent than the town boy and girl? Are they less interested in their work or less industrious in their studies? Do they not make as good use of their education? Are they not entitled to their share of the happiness and success which only a good education can give them? There are no brighter or more responsive children in our whole school system than those coming from the farm homes. Yet they are too commonly found in a little, insufficient rural school that has had its day, and that should pass into history along with the log cabin, the wooden plow and the ox cart. These rural boys and girls represent the best blood, brawn and brain of any group of American people. They are not afraid to work. They are earnest and sincere. They greatly profit by a good education, and are seriously handicapped without it. The nation owes them a more efficient and practical education than they are receiving.

This better service in the public schools can be had for our rural children, and it will be given to them. For the

The farmer can support better schools farmer is prosperous and abundantly able to educate his children. And he is ambitious to do so when he sees the

necessity, and understands the directions that improvement in education should take. Let the farmer but fully comprehend how far his child is from having educational opportunities equal to those provided for town and city



Modern farming in the Middle West. The traction engine carries a headlight, making night work possible. The automobile shows another phase of farm development. The rural school house in this district is as it was twenty-five years ago, and the equipment and course of study no better

children; let him but see how greatly his child is handicapped by lack of training with reference to the life and work of the farm; let him but understand how far the old type of district school is behind the times; and he will be the first to seek a remedy for these conditions. The farmer has the wealth, and will not hesitate to see it taxed for the education of his children; he has the intelligence rightly to value true education; he will finally be the most potent factor in the reconstruction of the rural school when he has come to see its great possibilities.

Indeed the farmer is already awakening to the new necessities for education for his children. This is seen in the alarming tendency of farmers to move in increasingly larger numbers to the towns in order to obtain better educational facilities. A recent investigation among a large number of families who had deserted farm life for the town showed that more than four out of five gave the inefficiency of the rural school as the chief reason for the change. These farmers felt the obligation to give their children an education equal to the demands soon to be placed on them, and saw no way to accomplish it in the present rural school as it exists in their community.

Grave social and industrial dangers lurk in the movement now going on from the farms to the towns and cities. Not the least of these Social and industrial trial dangers is the effect on the middle-aged parents who, long accustomed to the life and work of the farm, are asked suddenly to change all their habits of life. Older people do not, at best, adapt themselves to new conditions so easily as younger ones, and in this case the new conditions place the father and mother at a decided disadvantage. The farmer misses the interests, the life, the activities to which he is accustomed. There is

nothing for him to do, and trained to a life of work, he does not know how to employ his new-found leisure. Hence, leisure soon degenerates into idleness and discontent. The zest is gone from life, and health and longevity are threatened. The farm mother, moving to the town, misses the old environment hardly less. True, she still has her household to look after, but the old duties connected with the farm home are gone, and new pathways have to be blocked out. The old neighbors, friends of a score of years, are no longer at hand, and the clubs and social organizations of the town are strange and unfamiliar. Arduous and trying as was her work in the old home, something of happiness and tranquillity was lost in the change to the new.

A second great disadvantage coming from the urbanization of our people is the irreparable loss to the farm itself. When the farmer moves to town with his family, not only does the farm lose the services of the heads of the family—the father and mother who are usually still in the working prime of life—but in too many cases it also permanently loses the boys and girls who are taken to town for their education. *For the education of the town school does not lead to the farm, but away from it.* That this is true even of the smaller towns and villages is abundantly proved by the relatively small proportion of its farm-born pupils who return to an agricultural career.

The drain from the farm is so great that for the present generation it has amounted to about one per cent. a year.

Need of more and better farmers And this has been going on at a time when the country has been urgently in need of more and better farmers, that through their increased numbers and efficiency the cost of living might

be reduced; it has been going on at a time when the professions have been greatly overcrowded, and do not need an accession of numbers; it has been going on at a time when we already have too large a proportion of our people in the towns and cities seeking to make a living through *selling* commodities instead of producing them; it has been going on at a time when the vocation of farming has been offering greater opportunities and larger rewards than ever before in our history. And when it is remembered that those who leave for the purpose of education are, on the average, the more enterprising and intelligent of our rural people, it also becomes evident that there must be some lowering of our farming population in quality, as well as numbers, through the movement.

It is true that there are many other factors than a desire for education responsible for the agricultural exodus. **Other factors leading from the farm** to the towns. Many of the very influences that have made the life of the farm broader and more interesting have had a tendency to foster a spirit of discontent with farm life and a desire for a more varied experience. The daily papers make the farm youth familiar with the life of the city. Magazines and journals familiarize him with the daring and rewards of great commercial enterprises. Books broaden the mind and extend the interests beyond the routine of the daily farm life. The automobile and the train give him a glimpse of the world of recreation and pleasure. Natural social impulses cause him to shrink from isolation and seek association with the people daily brought to his mind through reading or imagination.

Yet most of these tendencies are very closely related to

a broader education, and to the functions rightly belonging to the rural school. The rural school can, at its best, do much to remove the false glamour of the rural school from the city by making the country more attractive. It can open up the way to and prepare for a career in agriculture in every way comparable with the commercial careers open in the cities. It can unlock to the farm youth the treasures of literature, history, science and art. It can afford opportunities for recreation, amusement, and social mingling with others so necessary to the development and happiness of the young. In short, the rural school occupies a strategic position in the life and welfare of our rural communities. It will be the greatest factor in advancing the agricultural movement now gathering headway in the nation, or else, failing to grasp its opportunity, will prove a stumbling-block, and be supplanted by town and village schools.

It is left for the rural school to join hands with the farmer and offer the farm boy and girl a better education than the town can give them—better signs in that it is adapted to their needs and prepares them for their duties. And the rural school will rise to its opportunities. It is already rising; indeed, it has risen in many places. Some of the most marvelous educational advances made in our generation have taken place in the rural schools. It will be our purpose in the following chapters to describe some of these lines of progress, and show how they can be extended to still other rural schools.

FOR TEACHERS' DISCUSSION AND STUDY

1. Why is the rural school used so much less as a social center now than formerly? Will it be possible for

the school again to take up this function? If so, how can it be brought about?

2. Why has the rural school fallen so far behind urban schools in recent educational progress?

3. Is there any validity in the seeming assumption that rural children can not be expected to have so good an education as town children? (Economic and social factors.)

4. To what extent do you think that the failure of the rural school to measure up to its responsibilities is accountable for the present drift from the farms to the towns and cities? How can the rural school be used as a force to hold young people to the country instead of driving them from it?

5. Do you know the percentage of illiteracy among those over ten years of age in your school district? Township? County? State?

6. Make a comparison of the school improvements effected in the town and country schools of your county during the last fifteen or twenty years: (a) in buildings and equipment; (b) in curriculum; (c) in requirement for teachers, and salaries paid. Has not rural prosperity increased at least as fast as town prosperity?

7. How many farmers of your township have moved from their farms to town during the last five years? What are they now doing in town? In how many instances did they go to town for better school facilities? Is it in general true that those who have been leaving their farms average a higher and more progressive type than those who remain?

8. Do you think that country schools can be made as efficient as town schools? That country life can be made as attractive as town life? If so, what factors are required in each case to accomplish such a result?

CHAPTER II

THE CALL FOR EFFICIENCY

Efficiency is the demand of the age. This demand has been slow in reaching the rural schools, but it is now making itself felt. The pressure for better facilities for the education of farm boys and girls is becoming insistent in nearly every section of the country. Marvelous advance has already been made in many communities, and large plans are now under way in others. Owing to the problems arising from this reconstruction, it is worth while to ask ourselves what constitutes efficiency in the rural schools, how it is to be measured, and how obtained. How are we to tell whether a particular rural school, or type of schools, is yielding the highest possible returns? How shall we go to work to increase the efficiency of all our rural schools?

If it were as easy to measure the efficiency of a school as that of an engine or a factory, the problem would be simple. But such is not the case. For the final outcome of the education of a child can not be told until years have passed. And even then, many factors besides his schooling have entered into his success or failure. It is therefore impossible to fix the exact proportion of responsibility which the school must bear in determining the results of a life. But there are, nevertheless, some

Difficulty in measuring school efficiency

measures that we can apply to the efficiency of a school without depending on the more remote and uncertain ones. There are certain accepted business principles as immediately applicable to the running of schools as to the operation of factories or farms.

One of the first measures of the efficiency of a school is its *drawing power*—the proportion of those of school

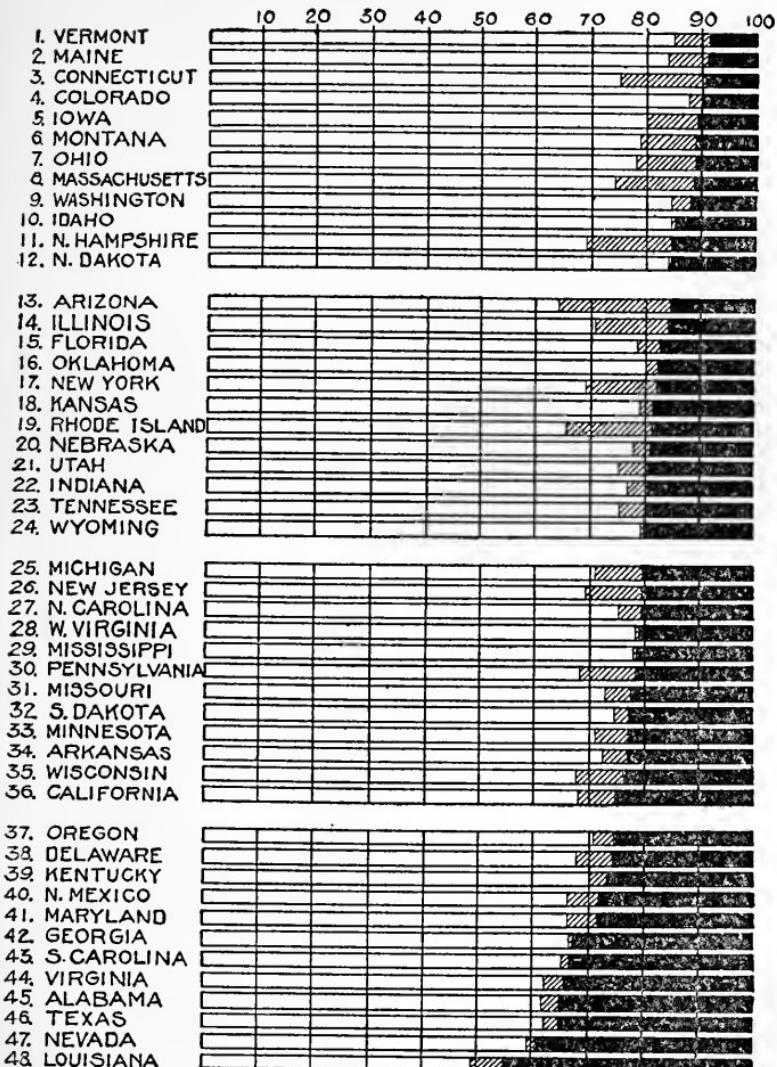
Drawing power a measure of efficiency age in the community who are found within its walls. Do the children at-

tend school, or do they drop out at the third, fourth or fifth grade, not having developed an interest in education or discovered its relation to their welfare and success? Is the school running with half the attendance it should have, while the other half of the boys and girls are entering on life handicapped from the lack of what the school should be able to give them? Another phase of the same question has to do with the regularity of attendance of those who are enrolled. It costs as much to run the school when half or two-thirds of the pupils belonging are present as when all are. And the school itself will run much more satisfactorily and smoothly when all are present than when only a part are in attendance. Here then is an important test of school efficiency—is the school able to command the full time of its pupils, or do they remain out unnecessarily or for trivial reasons? Are they and their parents ready to sacrifice if need be that the children may be at school every day, or is absence taken lightly and as a matter of course? Is school-going a serious business looked upon seriously, or is it largely incidental? Let us seek answers to these questions.

The full elementary course of eight years occupies about nine months of the child's time each year from the

age of five or six to thirteen or fourteen. And if the high school is also included, a corresponding amount of time required for time each year will be required up to school course the age of seventeen or eighteen. The proportion of children between these ages who are in the schools will therefore afford one measure of the rural school's efficiency in attracting and holding its constituency.

There are no statistics available showing the exact proportion of rural children of certain ages who are enrolled in school, yet the approximate facts are known. Counting all schools, both rural and town or city, one-quarter of the states have at least eighty-five per cent. of all children between five and eighteen registered in school; another quarter have at least eighty per cent. between five and eighteen in school; a third quarter, about seventy-five per cent.; and the remaining quarter, less than seventy per cent. When it is remembered that these statistics include all town and city schools as well as rural schools, and that the proportion of country children in school is frequently less than half that of town children, it is seen that we greatly need to increase the *drawing power* of the rural school. Counties may be found in many rich and intelligent states where hardly a score of children in the whole county annually complete the work of the eighth grade of the rural school, and consequently where very few rural pupils are to be found in high school. It is probably safe to say that our rural children are on the average quitting school with not more than four out of the eight years of elementary school work. This amount of education must in the long run spell industrial and social inferiority for our agricultural people. Efficiency demands, therefore, that the rural school shall be able to

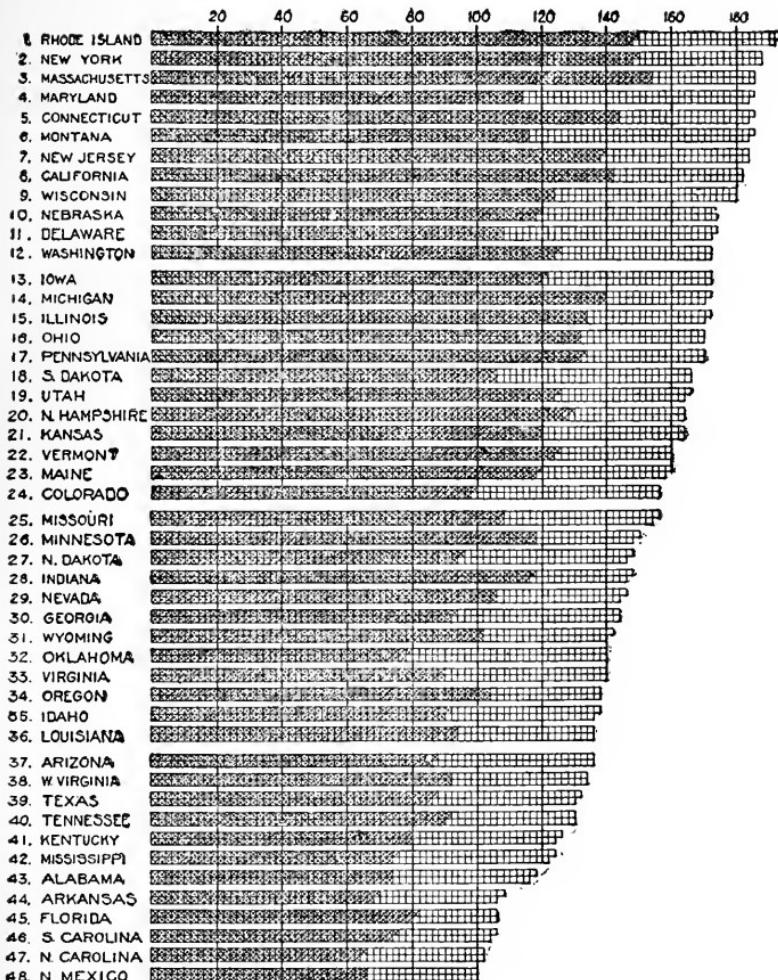


Per cent. of the school population enrolled in 1910. White indicates children in public schools, shaded in private schools, and black not in any school.

—Courtesy of Russell Sage Foundation.

command a greater supply of the raw material of education—the boys and girls who are within reach of these schools and suffering for the want of what the school should be able to give them. A larger proportion of the farm children must be brought to enroll in the rural school, and held for a longer time under its influence.

To obtain this result will require both new ideals in the organization and work of the school, and the personal influence of capable and devoted teachers. Possibilities in these directions are suggested by a typical incident occurring in a western rural school. A young man was engaged to teach in a certain district where there were two brothers, fifteen and seventeen years of age, who had dropped out of school in the third and fourth grades respectively. Their parents could barely read and write, and the boys were but little more advanced. Of course they had no notion of ever again entering school, but were settling down in sullen doggedness to the work of the old farm, which showed the effects of low standards and poor methods of cultivation. Our young teacher visited this home a week before the opening of the term. He understood the boys, and wanted to help them. He invited them to enter the school. The boys were not enthusiastic. Our young teacher called again a few days later. He had thought of a new idea. He talked to the boys about the new studies now taught in the rural school. He described the work in agriculture and manual training which they could enter, and its relation to their success on the farm. They became interested; and they liked the young teacher who cared enough about them to want to help them. These boys enrolled in his school on the opening day, and are now among his most enthusiastic pupils in school.



Length of school year and average attendance in each state in 1910.
 Each small square represents one day schools are kept open. Shaded portions indicate average attendance.

—Courtesy of Russell Sage Foundation.

thusiastic pupils, leading their classes in agriculture and manual training, and making rapid progress in their other studies. This case, with varying details, of course, could be duplicated in thousands of other rural communities where boys and girls have become discouraged and quit school too soon. Given the right kind of teachers and right conditions within the school, it would not be difficult to double the enrollment of the rural schools.

But increasing the enrollment in rural schools is not all. Efficiency also demands that the school year be made longer in many schools. To complete the elementary school course requires for the average child approximately eight years of one hundred and eighty days each. But comparatively few rural schools have one hundred and eighty days of school a year. Even counting in the town and city schools, there are only nine of our forty-eight states that keep their schools open for an average of nine months each year, and half of them average less than seven months. The rural schools in general average a school year not more than two-thirds to three-fourths as long as that of towns and cities; hence we find the rural school year running from about four months in certain states to eight months in others, and probably averaging not more than six months for all. What would we think of the efficiency of a factory which had available the plant and raw material for steady employment, but which shut down for a half of each year, leaving its patronage wanting in the product it was to supply? Yet that is what the rural school is doing in altogether too many instances.

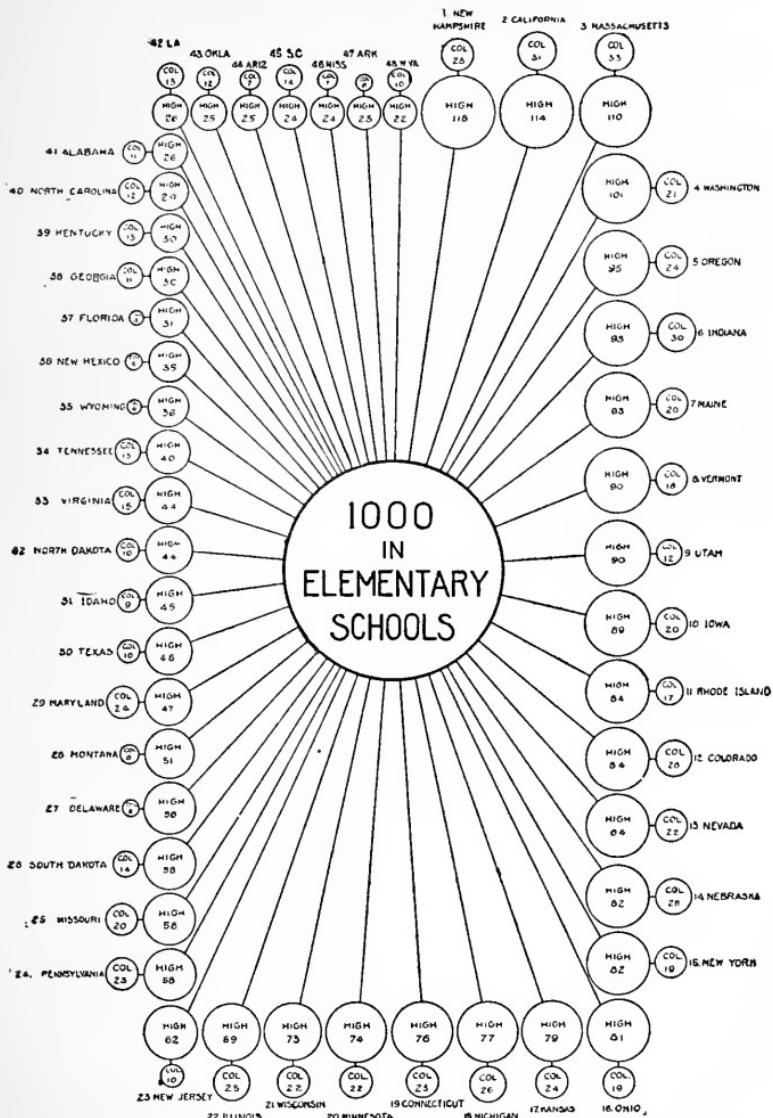
Not only is the rural school year short, but the real attendance year is shorter still. For the attendance in many schools is very irregular, with from a third to a

half of the pupils absent every day. In not more than half of the states will the average daily attendance in rural schools reach two-thirds of those enrolled; in other states the daily attendance is barely more than half the enrollment. This means, of course, that, on the whole, the children enrolled in the rural schools come to school only every other day, or at best but two days out of three. It will manifestly not solve the problem to increase the length of the school year, without at the same time improving the regularity of attendance. For this would but cause additional expense without commensurate returns.

The combined result of the short school year together with the short attendance year is rather appalling. For, Results of short time attendance let us assume that each rural child is to complete the full eight-year elementary course; because of the short year and irregular attendance, however, it will take him much more than eight years to finish the course. In fact, in at least one-fourth of our states, *it would require fully twenty years* to complete the elementary course at the rate of attendance now obtaining. Even in such typical agricultural states as Ohio, Indiana, Illinois and Iowa, *sixteen years would be necessary* to complete the eight-year course with the rural-school attendance year what it now is. This is to say that, on such a basis, an average pupil entering the rural school at the age of six, would receive his eighth-grade certificate at the age of twenty-two years. If he should go on through a high school at the same rate, he would have earned his high-school diploma by the time he was thirty. Of course this is preposterous, and obviates the necessity of further argument to show the necessity for reform.

So much for our first measure of efficiency. It reveals one of the greatest weaknesses of our rural-school system—the waste of money, time and opportunity through failure of the school to gather its pupils and hold them a sufficiently long time in attendance. The situation finds its analogy in agriculture, where time and attention have recently been given to obtain a more perfect stand of corn. We have come to see the folly of plowing, planting and cultivating a field that has only two-thirds of the stalks it should have. For this means a waste of land, of labor and of returns. So with the rural schools. They do not have a sufficiently large "stand." We supply buildings and equipment, and employ teachers for approximately *half the pupils that should be in attendance.* What a lamentable waste! No commercial business could run on this basis without ending in bankruptcy. Nor can we afford to conduct our schools on so low a scale of efficiency.

A second great measure of school efficiency is the *type of education* afforded. Is the training given what the community most needs for its own interests and welfare? Does the school serve to fit the pupils into the concrete activities and obligations of later life? Specifically, does the rural school make better farmers, citizens and keepers of homes? Does it not only supply the broad and general foundations of knowledge which all must have, but does it help the boy in the problems of agriculture, stock raising, and the mechanical work of the farm? Does it train the girl to understand and care for the farm home, making it comfortable, hygienic and artistic? Does it serve to attract its pupils to farm life, instead of driv-



Pupils in high schools and colleges for each 1,000 enrolled in elementary schools in 1910.
—Courtesy of Russell Sage Foundation.

ing them from it? Here again we may seek answers to our questions from actual facts and conditions.

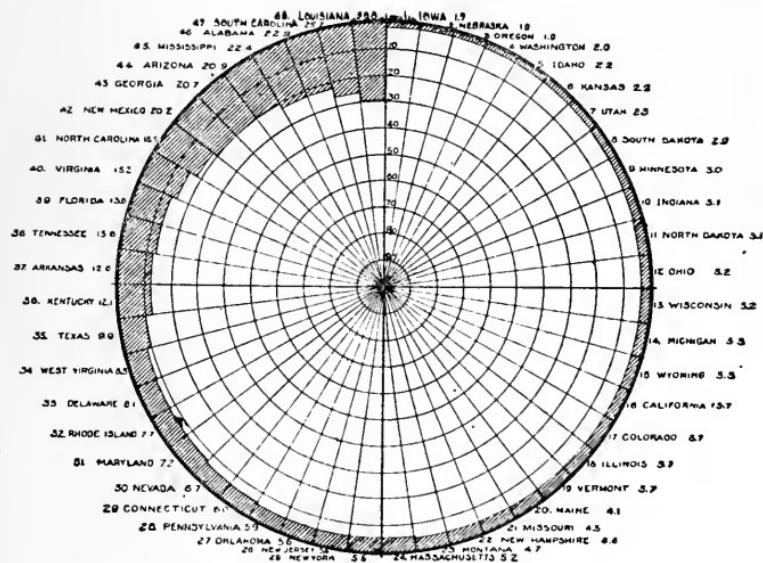
The rural school should help the farmer to obtain greater returns from the labor he expends, and at the same time aid him in providing a larger supply of food for the millions who are dependent on the yield of the soil for their daily bread. The farmers are perhaps the hardest-working and most frugal of all our industrial classes, but much of their labor goes for naught through lack of the knowledge and skill required for the largest returns from their work. It is safe to say that they could double the profits from the farms with little additional labor, if they would but put into practise as good methods of farming and stock raising as are now known and easily available to all. And the most natural and effective way to put the farmer into possession of the scientific knowledge and skill required is through the rural school.

Many rural schools have awakened to their opportunity, and are adding to the wealth of their communities by introducing better methods of farming. The great need for further work along these lines is seen in a few illustrations. It was estimated by experts that the farmers of Indiana, in the season of 1911 averaged seventy per cent. of a perfect stand of corn; and that approximately a perfect stand could have been had through two additional expedients, the testing of the seed and better preparation of the soil for planting. The farmers of Indiana planted 5,000,000 acres of corn for that season's crop. But a seventy per cent. stand means that only 3,500,000 acres actually grew corn. Thus the farm-

Lines of opportunity open to rural schools

THE CALL FOR EFFICIENCY

27



Per cent. of population ten years of age and over who were unable to read and write in each state in 1910.

—Courtesy of Russell Sage Foundation.

ers of one state were plowing, planting, cultivating, and paying interest or rental for 1,500,000 acres of land for which they received no return, simply because they had no crop growing on it. The annual loss to the farmers of Indiana from this one source amounts to nearly 60,000,000 bushels of corn, or enough when sold to support four public-school systems as expensive as their own, or to build several thousand miles of excellent highways. And besides this, the world, already paying far too high a price for food products, is deprived of a vast amount of food to which it has a right.

Similar illustrations may be found in any agricultural state. The average corn yield in Kentucky for 1910 was **The rural school** twenty-nine bushels to the acre. More and better farming intelligent methods of farming, together with but little more labor expended on the crop, would easily have doubled the yield. But an increase of even five bushels to the acre would have netted the state over ten million dollars additional income from the corn crop. And it is one of the opportunities of the rural school to show how to obtain the increased yield. The rural school can do it, it is doing it in many communities. It is the claim of government statisticians that the rural schools of Canada increased the wheat yield in certain regions of that country five bushels per acre in a few years' time. Iowa is at present raising less than forty bushels of corn to the acre, in spite of an excellent climate and the fact that this state has one of the best corn soils to be found in the country. Experts tell us that Iowa can easily raise seventy-five bushels to the acre; all that is needed is better methods of farming. This means that Iowa farmers are annually paying some 200,000,000 bushels of corn as the price for the lack of information concerning farm

work and methods that could easily be acquired. It also means that the consumers of food are paying their share in increased cost of living for this ignorance and carelessness.

And the consumers of food will soon have to be reckoned with in our problem. For the food situation is coming acute. It is carefully estimated that our population is at present increasing five times as fast as our food supply. This can not continue indefinitely. High prices are but an indication of a mild degree of famine. Our resources have been so rich and our population so sparse that we have been very wasteful of our natural wealth and especially the wealth of our soil. But practically all our tillable land is now under cultivation, or so large a percentage that the addition of the remainder will produce a hardly noticeable effect. All this is to say that our increasing millions must be fed from the land that is now under cultivation. Manifestly the only way to accomplish this is to increase the productiveness of our soil. It is not only a humiliating waste of labor and opportunity to obtain less than half of what the soil should yield for the labor we put on it, but it is a grave injustice to every person who is dependent on our farms for his food. For there is only so much tillable soil to be had; from that we all must be fed. And those who, in the distribution of our population, have settled on the land, must see to it that we are fed; or else they have no right to occupy the soil. They must be willing to educate themselves and their children in the art of better farming.

And the signs are most encouraging. A new spirit is entering into our agricultural work. The leaven is being planted. Many forces are at work to educate the farmer.

The federal government is encouraging improved methods of farming in every practical way. Bulletins of **Education in agriculture through rural schools** information are being freely distributed. Educational experts are traveling about, giving instruction in agriculture and stock raising or other phases of farming. The state agricultural colleges are attracting hundreds of young farmers to their courses of scientific instruction, and are even going out over the state and bringing their instruction to the very homes of the farmers. High schools are introducing courses in agriculture, and normal schools are opening courses to prepare teachers for this field of work. But by far *the greatest factor available for the agricultural education of our boys and girls is the rural school.* For here they all should be found. Only a few ever get to the agricultural college. Not a large proportion attend even the town high school; and too many of those who do never return to the farm. If the great mass of our farmers are to be taught to obtain the largest fruits from their work, and to return the greatest amount from the soil for the food supply of the world, this instruction must be given in the rural school. No other agency can reach all of them.

Supplementing the work in agriculture in the efficient rural school, there must be manual training for the boys **Manual training in rural schools** and domestic science for the girls ranged with especial reference to the problems of the farm and the farm home. The farmer is constantly called on to exercise his skill as a mechanic in connection with the buildings and equipment of machinery of the farm. No carpenter, cement expert, or blacksmith is at hand, and much time is lost if a trip must be taken to the town shop, or the matter at hand

left unattended to. Every well-equipped farm of to-day needs a full set of carpenter's tools, a forge for the mending of minor mishaps to machinery, and the necessary appliances for other mechanical work. But these are of small value without the knowledge and skill to put them to practical use. While the rural school can not hope to train to expert skill in all these lines, it develops the elements of manual skill, and leads to interest in such occupations. Manual training in the rural school is of great economic value to every farm boy.

Similarly in the case of domestic science as a preparation for the care of the farm home. The housewife caring for a farm home has a different problem from that confronting the keeper of the city home. A larger proportion of the food is raised and prepared at home for the table of the farmer; there is less dependence on canned foods, baker's bread, ready-made desserts, and all the other city devices to lessen the amount of preparation of food in the home. The sanitation of the farm home is also a far greater problem than in the case of the town home where city water, sewers and garbage wagon solve some of the greater problems of hygiene. The care of the home to make it attractive on the esthetic side is a problem that needs further attention in the rural schools. For the natural beauty of country environment, the possibility of flowers, shrubs and gardens to make the surroundings inviting in connection with the rural home have never had the attention they deserve. Likewise should the girls of the country home receive instruction in the art of home furnishing and decoration, and all that goes to make the home attractive in its interior equipment. In fitting girls to be expert home-

makers, the rural school finds one of its greatest opportunities.

For many reasons the country is more healthful than the city. Yet it is doubtful whether the greater part of **The rural school and public health** our rural population live under better hygienic conditions than industrial workers of equal financial status in towns and cities. Certain it is, at least, that farmers and their wives age early, that insanity is at least as prevalent in rural districts as in the city, and that many preventable diseases show a higher mortality in the country than in towns. With all its natural advantages over the city, statistics show almost as high an aggregate death rate for the country as for the crowded rushing cities.

Statistics show that about 400,000 of our rural population are killed each year by infectious diseases, the result of poison by bacteria. By far the larger part of this sickness and death could be prevented by following simple and easily taught rules for hygienic living. It is one of the great functions of the rural schools to teach and show the necessity for following these rules. The old course in physiology such as would be suited to the knowledge of the surgeon or the doctor is not what is needed, but the simple scientific facts that have to do with preventing disease, and maintaining the highest degree of physical health and efficiency.

An illustration will show the practical trend that one phase of hygiene may take in the rural school. Careful **Teaching of hygiene in rural schools** studies of the water supply on many farms in the United States have shown that approximately sixty per cent. of the farm wells are polluted by house and barn-yard drainage, thus endangering the health of the family.

through ignorance or carelessness. Though farm children are close to the source of milk supply, thousands of tests have shown that milk is constantly being used from tubercular cows, thus exposing the children of the family—the greatest milk users—to the danger of this dread infection at the age when they are most susceptible to its ravages. Human and animal waste is on most farms improperly disposed of, and supplies a breeding place for flies, which transfer filth and microbes to the food eaten by the family. The air breathed in farm homes during the winter months is commonly more impure than that in city homes, because of more inadequate ventilation. Cellars are frequently damp and improperly drained, and the common drinking cup is very generally in use.

The result of these easily remedied unhygienic conditions is measured in the annual loss of more than eighty thousand of our rural population through the ravages of tuberculosis; of nearly sixty thousand through intestinal troubles other than typhoid; of fifty-five thousand through various forms of colds; of fifty thousand through pneumonia; of sixteen thousand through typhoid; and so in lesser numbers through diphtheria, scarlet fever and other such diseases. Here, then, is one of the greatest lines of service open to the rural school—to teach the rules of better living, so that life may be longer, health and happiness greater, and physical efficiency more perfect.

A third measure of a school's efficiency is *its hold upon the loyalty of its constituency*. Do the people believe in Loyalty a measure of efficiency the school, and feel a personal interest and pride in its welfare? Have they a sense of ownership in the school? Do they look

upon it as a paying investment for the community, or as a forced drain on its resources?

On the attitude of the patrons toward the rural school will depend much of the success of the reforms now under way. For neither compulsory education acts, nor laws governing the type of school buildings or course of study, nor any other legal compulsion can finally result in efficient schools. These may all be necessary, and serve a good purpose. But not until the rural school is fully and enthusiastically adopted as the community's best ally and friend, will it attain full efficiency.

The efficient rural school is, then, the one that *wins its way into the confidence of its patrons*. And out of this confidence will arise a practical loyalty and support which, in turn, will mean new and greater efficiency for the school.

Efficiency can therefore be measured by the extent to which the school is able to fit itself helpfully into the conditions of the community and serve its needs. Nor does this mean merely the intellectual needs of the children, but all phases of community life and activity. To illustrate:

A rural school in Indiana was not long ago half grudgingly equipped with a small outfit for manual training. **Concrete cases of service rendered** The boys of the school had been studying in their course in agriculture the best type of chicken coop for the mother hen and her brood. For manual-training lessons, the boys were set at work making these coops. The coops were taken home and tried. They proved serviceable and were soon in great demand around the neighborhood. Indeed the demand was greater than could be supplied. The school, in a few weeks, sold coops

	CHILDREN IN SCHOOL	SCHOOL PLANT	EXPENSE PER CHILD	SCHOOL DAYS PER CHILD	SCHOOL YEAR	ATTENDANCE	EXPENDITURE AND WEALTH	DAILY COST	HIGH SCHOOLS	SALARIES
1 WASHINGTON										
2 MASSACHUSETTS										
3 NEW YORK										
4 CALIFORNIA										
5 CONNECTICUT										
6 OHIO										
7 NEW JERSEY										
8 ILLINOIS										
9 COLORADO										
10 INDIANA										
11 RHODE ISLAND										
12 VERMONT										
13 NEW HAMPSHIRE										
14 UTAH										
15 OREGON										
16 MONTANA										
17 MICHIGAN										
18 N DAKOTA										
19 IDAHO										
20 MINNESOTA										
21 IOWA										
22 MAINE										
23 PENNSYLVANIA										
24 KANSAS										
25 NEBRASKA										
26 S. DAKOTA										
27 NEVADA										
28 WISCONSIN										
29 WYOMING										
30 ARIZONA										
31 OKLAHOMA										
32 MISSOURI										
33 W. VIRGINIA										
34 FLORIDA										
35 DELAWARE										
36 MARYLAND										
37 TENNESSEE										
38 TEXAS										
39 LOUISIANA										
40 NEW MEXICO										
41 VIRGINIA										
42 KENTUCKY										
43 ARKANSAS										
44 GEORGIA										
45 MISSISSIPPI										
46 N. CAROLINA										
47 S. CAROLINA										
48 ALABAMA										

Chart by states showing the rank of each state in ten educational features.
—Courtesy of Russell Sage Foundation.

enough not only to pay for the manual-training outfit, but also greatly to increase it. But best of all was the new interest aroused in the school throughout the community. Here was something tangible, a very definite link between the work of the school and the interests of the farm. The result has been a fully equipped school, with a broader and better curriculum, and loyal support on the part of an increased patronage. And this greater efficiency, which all originated with a hen coop, has extended until it has included a finer school spirit, and better work in all the studies.

The experience of a young teacher in a Minnesota rural school illustrates the same point. When he entered on his duties he found the school poorly equipped, the interest of the pupils at a low ebb, and an almost total lack of educational spirit in the community. The district was situated in the midst of a dairying region. The young man struck an idea. He prevailed on a local creamery to give the school a cream tester. Then he taught both the boys and the girls how to use it. Samples of cream were brought from all the homes. Reports of the tests were sent back with the children. Farmers awoke to the fact that there is a great difference in the cream producing qualities of cows. They were astonished to find that they were keeping certain cows at an actual loss. On the strength of the school tests one man disposed of ten out of his herd. The farmers all grew interested, and conducted tests for themselves, the result being greatly increased earnings on many farms. But more marked than all was the changed attitude toward the school. Loyalty took the place of indifference, the tone of the work improved and finally a new and modern building

**Support ready
when returns are
assured**

supplanted the old one. The school had convinced its constituency of its value in the community, and the community immediately responded by giving the school both moral and financial support.

This principle could be similarly illustrated in thousands of other rural schools scattered throughout the country. Nor need it be feared that **Industrial subjects** **a help to other studies** the new emphasis being placed on industrial lines of work in the school will lower its efficiency in other subjects. The opposite is the case. The universal experience is that the new life and greater interest coming to the school through these practical subjects have reacted on the older branches much to their good.

Another fruitful direction in which the rural school is extending its efficiency is that of supplying the **The rural school as a social center** community with a general neighborhood, or social center. The dearth of amusement and the poverty of social meeting places in the country is one of its great drawbacks, and a source of discontent tending to draw people from the farm. The rural school can do much to remedy this lack, and at the same time increase its own efficiency. The last few years have seen scores of rural schoolhouses and grounds reconstructed with a view to making them available for social as well as intellectual purposes. This movement is being rapidly extended in many states, and is one of the most promising forms of service opening up to the rural school.

It may be said that these new ideals of efficiency will demand radical changes in many of our rural schools. **Changes demanded by new ideals** That is true; and many of them need radical changes. But the changes re-

quired are all a practical and possible kind, and only such as have already been carried out in many of the more progressive rural schools. Nothing has been proposed that is not now in use in various schools widely scattered in different states. We shall need to change the rural school curriculum; many of the rural schools will need to be consolidated; better buildings must be supplied; better trained teachers must be provided, and they must receive larger salaries. These things are the price of efficiency. They can be had by such rural schools as are able through their present hold on the community to claim them; the school gets only as it gives in return. How large numbers of rural schools increased their efficiency, and how others may follow their example, will be more fully outlined in the following pages.

FOR TEACHERS' DISCUSSION AND STUDY

1. What chief factors other than those of the school are operating to educate the child: (home activities, community, church, press, etc.)?
2. What percentage of those between the ages of six and eighteen in your district who have not completed a full elementary course of eight years are not enrolled in school? What causes led to their dropping out? How many of them could still be induced to go to school if conditions were right?
3. What is the average percentage attendance in your school? In your county? In your state? Based on the number of days your school is open each year, and assuming that eight years of one hundred and eighty days each are required to complete the country school, how long would it require for the average of your school to finish the course? How long for your pupil with the highest

average attendance? For the one with the lowest average attendance?

4. Consider making for your county a chart by townships similar to the one on page thirty-five for the different states.

5. After studying the chart, decide in which of the tests of efficiency your state ought to rank higher than it does. (Note that the number of children in school and the value of the school depend in part on population and the size of the state.) What means would be required to bring about the improvement you suggest?

6. What have the rural schools of your region done in any direct and immediate attempt to relate their work more closely to the farm? What are the next steps to be taken?

7. It has been argued by some that instruction in agriculture can not be made effective below the high school. What is your judgment on this question?

8. Make a careful analysis of the loyalty and interest and the disloyalty and indifference toward the school prevailing in your district: What percentage can you count as loyal and interested? As disloyal and indifferent? Can you suggest what is required to improve conditions?



PART II

THE CURRICULUM OF THE
RURAL SCHOOL



CHAPTER III

THE OLD CURRICULUM

The modern rural school must have a broader and more practical curriculum than the old type of school. While it is a justifiable boast that our nation has a very low percentage of illiteracy, and while certain agricultural states where rural schools prevail have the lowest percentage of all, yet such a test for education will no longer serve. It is well worth while to have the advantages of education so well distributed that every citizen is able to read for himself concerning the world in which he lives; and this is a great advantage over former centuries. But bare literacy is too low a standard to be taken in our day as a measure of education. The opportunities are too great, and the demands too pressing for this to be adequate. Our quest must now go farther and ask to what extent education has prepared for the highest degree of efficiency. We must not be satisfied that most of our people possess a little education, but must make sure that they possess an education equal to the opportunities and demands of the age.

It should therefore be assumed that every rural boy and girl of to-day is to learn the simple elements of **Mere literacy no longer a test** reading and writing. It is a crime against childhood and against civilization where it is otherwise. But we must next ask to what extent they have entered into the waiting heritage

of the world's great literature; do they like to read, and do they know what and how to read? How far are they acquainted with the great lessons of civilization as revealed in history, and as shown in the development of their own country? How familiar are they with the machinery of government of their country, state and nation, and how ready patriotically to share its responsibilities? How well do they know the fruitful fields of modern science, especially as it relates to their own lives and bears upon their line of work? Have they secure in their possession the easily available knowledge of the science of agriculture and stock raising which will enable them to make highly successful farmers? Do they understand the economic principles underlying the successful business management of the modern farm and home?

Do the girls know not only the routine of house-keeping as learned in their homes, but also the science that should guide in the selection and preparation of foods, and the hygienic care of their households? Have they had an opportunity to study the arts that will enable them to make their homes beautiful, as well as comfortable and healthful? Have both boys and girls trained their hands as well as their heads to work skillfully, so that they have not only learned the dignity of labor, but have established high standards of excellence for all that their hands find to do? Are they grounded in the laws underlying physical health, and do they prize the purity and health of their bodies above rubies and diamonds? Is their education not only sufficient in amount, but also of the right kind to prepare them for the real experiences that await them in the estate of manhood and womanhood on which they soon will enter?

In short, are these rural boys and girls equipped with an education that will give them a fair chance for successful living under the stress of twentieth-century conditions?

All these questions must in some way be affirmatively answered by the rural schools; for our farm children **Vital subjects lacking in rural school** must be supplied with these fundamental aspects of education. But such questions can not be so answered by the old type of rural school with its meager and narrow course of study. Most of these things can not be learned in our rural schools, for they are not taught there. These lines of study have been excluded from the rural schools partly because the one-room school can not teach so many things at once; partly because the place which some of these studies should take is occupied by subjects that might well give way for more useful ones; and partly because the need for them has not been fully realized.

How many rural schools still teach essentially what the parents of the present generation studied in their **Old standards still prevail** rural school-days! Who of us can forget those early school experiences! First we began on our "letters," our spelling and numbers. We soon advanced to the dignity of reading and arithmetic, to which later geography, grammar, physiology and a small text in history were added. But the narrow and futile emptiness of the grind! We went over the First Reader, and then over it again, until we knew it by heart.—"Do we go up? We do go up. Will he go up? He will go up." These and such like striking tales were our unvarying mental diet day after day for a whole year of reading. Then we attacked the Second

Reader after the same fashion, and proceeded to wear it out, both literally and figuratively, as we had done with its predecessor. So we advanced to the wonderful Third Reader and, if we continued in school beyond this grade, to the fourth, or finally, even to the fifth of the series. We read them all through from beginning to end. We reviewed them. Then we read them by selections made by the class; finally, by selections made by the teacher. Thus for eight mortal years our thought and imagination were confined within the limits of a few pitiful little collections of stories which we read threadbare, and finally exhausted, while all this time a great storehouse full of beautiful things to read was waiting ready at hand. If only some one had unlocked the door for us, who can tell how much richer and more fruitful our lives might have been! Why were we not allowed to explore these rich literary fields, instead of being compelled thus to mark time at their entrance?

With like results we spent golden hours in grinding out the senseless tangles of impossible mathematical problems never to be met outside the covers of our dog-eared arithmetics, while at the same time we would have been unable to solve the simplest problems of home or shop or farm. How we puzzled our small heads over the mysteries of partial payments, especially arranged for the torment of the small boy; over all sorts of discounts never used in business; over profit and loss under conditions that would astonish merchant or banker; over compound proportion of truly appalling proportions; over the reduction of all but irreducible fractions; or over problems of imaginary hounds chasing imaginary hares for so many leaps of so many improbable lengths for such and such a distance,

Lack of practical value of studies

and so on ad infinitum, until we were lost in the maze. But did it not, after all, train our powers of thought? Perhaps in some degree it did, but think of the opportunity we lost of learning how to solve the *real* problems growing out of our actual life and work on the farm! And, besides, these would not only have given us equally good mental training, but would at the same time have attracted interest to our study of arithmetic, and shown us the relation of our school work to the work outside. Education might then have appealed more strongly to us as the road to efficiency, and more of us might have taken it.

And so also with much of the work in grammar. We learned that a sentence is "a thought expressed in words."

Studies that do not relate to life But we really came to believe that a sentence is a thing to be analyzed and diagrammed whenever and wherever met. That these sentences from the pages of the grammar belonged to the same world with the simple speech we were daily using, never entered our heads. We puzzled over the rules for indirect objects, and tried to understand the fine shades of difference between the object and the objective complement. We wondered at the distinctions causing one word to be classified as an adjective pronoun, and another as a pronominal adjective; and took on faith the statement that a noun which expresses amount, distance, time or direction has a right to be treated as an adverb. These things, all of which may be right and true enough, are perhaps of value to the advanced high-school student; but they were fed to helpless children in the rural school when they were no more suited to our minds than beefsteak to the diet of a babe. There we were, at the age best adapted to learning the *use* of our

mother-tongue, compelled to spend our time on its logical structure. When we might have been storing our minds with beautiful stories and poems, thus learning perfect speech by example and imitation, we were studying the barren rules of grammar. When we ought to have been busy with oral and written speech used to express the real experiences and vital interests of our immediate lives, we were employed in the deadening process of analyzing and diagramming the speech of other people. Unconsciously to our benighted minds we were begging for bread, but were given stones.

It was not far different with the remainder of the studies. In the study of physiology we were treated as **Useless versus use-** embryo medical students, and made **ful knowledge** to commit to memory the names of all the bones of our bodies, and not a few of the muscles as well. We were expected to be able to trace the course of a particle of food from the time it was taken into the mouth until it had passed through all the marvelous transformations involved in digestion, absorption and assimilation, and become muscle, or bone, or other tissue. But little did we learn about the kind of food we should eat, or the manner of its eating. Little did we study concerning the really important things connected with the health and development of our bodies. We accepted toothache as one of the woes of childhood, and were taught nothing of the care of our teeth. If we had bad colds, these were but a part of the inconvenience of the winter season, and we did not discover that they are only the result of unhygienic living. Contagious diseases were to be shunned and dreaded, but we did not know that they could be prevented. We ought to have been taught how to develop strong, healthy and beautiful bodies, but

were instructed in meaningless facts beyond our comprehension and unrelated to our physical needs.

Hour after hour in the geography class we droned the names of unimportant capes, bays, straits, gulfs and Time wasted upon peninsulas, which, though we may senseless drill since have read and traveled much, we have yet to meet outside the old geography. We developed great skill in "bounding" all the countries of Europe and Asia, but we actually knew very little of people or products outside the boundaries of our own township. We could glibly tell the names of the rivers, large and small, in many states, but had no notion whence the little creek that flowed past our playground came or whither it went. History meant to us chiefly a succession of dates to be "committed," of wars to be traced, and of kings and presidents to be learned in chronological order. Great would have been our surprise had it dawned on us that there were real people like ourselves living and working at the times referred to by our dates, our wars, our kings and presidents.

But we will not further multiply illustrations. Indeed this account of the dreary waste of the precious opportunities of childhood in the old dismeager and narrow curriculum still trict school would have no place at all in our present discussion except for the fact that the old conditions come so near representing the conditions that still exist in many of our rural schools. For the curriculum that has just been described is that of not a small proportion of the district schools of to-day, and the methods employed in teaching the subjects are not so different in some of them as they might be. But the change has begun. It is well under way in many places, and not a few of the most progressive rural schools have

a range of studies affording an excellent education for the rural child.

In planning the curriculum for the present-day rural school, it must not be forgotten that at least two great factors are calling for its enlargement and enrichment. First, most of the industrial lines of work formerly carried on in the home, and affording an excellent course in the practical phases of manual training and domestic science, have dropped out of the modern home, and must be given in the school if the child is not to be deprived of them. Second, under our newer ideal of education, as we have already seen, we are demanding a more practical training, with the aim of affording our children more immediate and concrete assistance in the every-day affairs of their lives; and particularly must the education given in the rural schools relate itself closely to the life and work of the farm.

The old-time home was the center of a varied group of industries in which each member of the family, from **Industrial training** the youngest child to the grandparent, in **old-time home** had a part. The flax for the linen of the household, and the wool for the clothing were raised on the farm, and every phase of their manufacture was carried out in the home. The children had a part in the clipping, carding, spinning and weaving of the wool. Did the son need a suit of clothes, the mother, without the help of a fashion-plate, shrunk and pressed the home-made cloth, cut it after a generous pattern treasured as an heirloom in the family, and made it by hand into the garments required. The style may not have been equal to that of the present day, but the suit represented a home industry from the time the wool was growing on the backs of the sheep in the field until it covered the back

of the lamb of the household. If a dress was required for the baby, or a trousseau for a bride, the process was the same; the farm supplied the materials, and the home did the work.

So it was with what went on the table. The fall "butchering day" was a great event. There was the bustle of **Training in domestic science** preparation, the heating of the caldrons of water, the coming of the neighbors to help, and the little thrills of sorrow and anticipation with which the children paid a last visit to the pens of the victims. There was the *he-o-he* of the men as they soused the porkers in the barrel of hot water, the frantic haste of the scraping, and the smooth and shiny white skins of the pigs as they hung, nose down, from the chains out by the shed. And then the cutting up and the salting down in barrels, the making of wurst and headcheese, and the smoking of the hams out in the old smoke-house!

There was also the dairy-house, through which the trough ran from the spring, and the rows of shining pans **Lessons in cooking** for the milk. The cream was put into the great stone churn, and the children took turns in working the plunger until the cream "broke," and the butter came. The pantry was laden with the great loaves of flaky home-made bread, rows of pies, jars of cookies fresh from the oven, plates of doughnuts and golden cakes. Rows on rows of dried apples and peaches hung in festoons from the rafters with brave disregard of the whole tribe of bacteria and microbes. Great bags of dried sweet corn were suspended from the beams of the ceiling. And shelves full of preserved plums, apples and berries were stored against the winter season.

Nor must we forget the workshop with its motley array of tools, and its treasure boxes full of odds and ends suitable for mending anything from the fiddle to the hayrack. In this shop was made or repaired much of the furniture for the home, and most of the machinery for the farm. And the rainy days, which were the busiest of all! It was then that the well-worn shoes were half-soled, the harness oiled and patched, the rakes mended, and the scythes and cradles sharpened.

In this old-time home every one was busy from morning till night, week in and week out, with only the rare holiday as a relief from the steady toil. And in all the industry, the children had a responsible and important part. They early learned to use their hands, and to take pride in their manual skill; they learned to work, and not to flinch before their tasks. They received an invaluable course in manual training and domestic science, which in some of its aspects can never be duplicated in the schools no matter how good their equipment or how skilful their instruction. For these home industries possessed a concreteness hard to simulate in the work of the school. Here the incentives were real, the interests immediate, and the necessities pressing.

But these days are gone. The factories have come and robbed the home of its varied industries. It is no one's fault; it could not be helped. The demon of enterprise came among us, and we were obliged to change our manner of living. The mail carrier brings our mail, and the telephone runs our errands. There is little wood to cut, and the grocer supplies our fruit and vegetables.

**Industrial changes
in the modern
home**

The pigs are now whirled to the city in a train of palace cars, passed through a packing-house and returned to us at astonishing prices as ham and bacon. And mother and the family no longer make the suits of clothes. Perish the thought! With the help of a tape measure and a printed blank we may obtain the services of the city tailor, and you can not tell from the cut of our clothes whether we belong to Prairieville or Broadway. The baby's dress comes from the catalogue house, and the bride's trousseau from the city modiste. Tomatoes and sweet corn now grow in tin cans, and apples are picked from barrels instead of from the orchard. The steam laundry is asking for our washing, and the baker stands ready to stock our pantry. Nearly all the old-time industries have gone from the home except cooking and cleaning, and with modern methods these are very different from what they were in earlier days.

All this is a grave loss to the education of the child. That there are many compensations is true, and no one is longing for the "good old days." Far from it; these are the best times the world has ever seen in which to live a happy and successful life, whether in the town or on the farm. But this does not change the fact that education is incomplete without careful training of the hand as well as the head. For the work that lies ahead requires both. And the school must undertake to supply to the child's education what has been lost out of the home. That is what the school is for—to make sure that our children do not lack necessary training that the home and the community, without the help of the school, are unable to give.

The school has taken over many functions that origi-

nally belonged to the home. In fact, among primitive peoples, the home gives the child all the education he receives, for they have no schools.

The school must take over functions lost from home Schools first came into being when it was found that there were many things required in the child's education that the home could not give. In our own colonial days the home was responsible for teaching the child the elements of reading and number before he was sent to school. And the old records of the New England town meetings contain many accounts of complaints made by the schoolmaster because neglectful parents had started their children to school "unprepared in their letters and numbers." In such cases the child was dismissed from the school until he had made up the deficiency. But in our later day the school assumes full responsibility for the child's education from the first, and does not expect the home to give any instruction. We have even gone so far that the kindergarten takes the child when he is too young to instruct in books and teaches him to play!

And the school must now take over the training of the hand, which the home, with its widely-varied industries was formerly able to supply. This **train the hand** is the only way, if this vital part of education is not to be lost; for the home can no longer accomplish it. If we are not to become a nation of mere readers of books in our education, the schools must provide for industrial education fitting our youth for the occupations awaiting them. The increased amount of schooling we are now giving our children has even led them farther and farther away from work with their hands; for the child who formerly worked in the home or on the farm for nine months of the year and spent



A department that should be represented in every rural school



three months in the school studying books, now spends from six to nine months in the study of books, and a correspondingly less time in work. And one who has devoted the greater part of his youth to books, and never learned to use his hands, will hardly seek an industry when he chooses his vocation. Nor is the remedy to have him spend less time in school and more in labor. That will not solve the problem. What is needed is for the school to provide such work as will train both hand and head, and lead to an appreciation of the value and dignity of industrial labor.

This point of view, together with the demand that the school shall fit more directly for the life and work of the

**Manual training,
agriculture and do-
mestic science to
be added** farm, calls for the addition of certain branches to the rural-school curriculum. Manual training and domestic science are needed to make up for their partial loss from the home, and also to give a more scientific and complete preparation in these subjects than any home is able to afford. Agriculture must also be taught, because that is to be the occupation of most of the pupils of the rural school, and because the school can greatly increase their efficiency as workers on the farm. The new movement throughout the country toward scientific agriculture makes it all the more imperative that the rural school should enter on this line of instruction. The introduction of agriculture into the rural schools has already doubled or trebled their efficiency in many places. It has resulted in increased attendance, in better work in all subjects, and in a spirit of loyalty toward the school on the part of the community. Through the agency of instruction in agriculture, the rural schools have been instrumental in adding millions of dollars to the wealth

of the country by increasing the yield of corn, oats and other crops. There is almost no limit to the service that can be rendered by the rural schools in educating the boys and girls to modern methods of farming.

If the children of the farms are to have opportunities for education equal to those of the town and city child, **Music and art to have a place** the rural schools can not stop with the subjects that are related to the work-life alone, though these may be the foundation of all the others. Personal attainments that have for their object the giving of greater satisfaction and happiness to their possessor belong to the rural child as much as to the child of the town. The rural school should make music and art a regular part of the course of study as is done in the town and city schools. Indeed there is much more need for these subjects in the country than in the city school, for the reason that the city child constantly has opportunities to hear music and to see pictures outside the school which the rural child does not have. And it is precisely these cultural phases of education that must not be left out of the rural school as the curriculum is being reconstructed in the direction of making it more practical, effective and interesting. For, while making a living is the first great necessity in the lives of most of us, life is, after all, more than making a living; and the finer joys, and the satisfaction that comes from an appreciation of the beautiful round about us, are among the most desirable attainments.

The changes needed in the rural school curriculum, however, are not all to be accomplished by the addition of **Standpoint and attitude** certain studies. The need is fully as great that *the standpoint and attitude toward many of the branches already in the curriculum*

shall be changed. Almost every subject needs to be vitalized by bringing it closer to the interest and needs of the pupils.

Instead of the dreary set of school readers read over and over, we must open up to the child the great store-

Changes in teaching, reading, arithmetic and other subjects house of inspiring books, and train his interests so that he will care to read them. This means that the rural school must provide a generous library

especially selected to fit the development and interests of children. It must have historical novels, and well-written histories. It must have simple books on science, introducing the child to the rich field of modern scientific discoveries and inventions, and especially such as relate most closely to the life of the farm.

The teaching of arithmetic must omit the tangled logical problems dealing with impractical conditions, and emphasize the arithmetic of the farm, the shop and the home. Let the arithmetic taught be correlated directly with the lessons in agriculture, manual training, domestic science, the practical measurements employed on the farm, and the accounts of the household, and it will prove both practical and interesting in a degree hitherto unknown.

Similarly, the physiology will need to be related more directly to questions of the health and development of the children. Not so much a course in anatomy and technical physiology is needed as training in hygiene. Geography can be made vastly more valuable and interesting by eliminating the trivial and unnecessary, and putting in its place matter dealing with peoples, places, products and industries closely related to the life of our own people and times. And so on with every line of

study. Let the aim no longer be to train a more or less mythical set of powers of the child by a senseless grind over meaningless exercises supposed to develop mental strength. But let everything that we teach start with some present interest or activity of the child, and lead as directly as possible to efficiency in meeting the actual problems that lie ahead.

If it be objected that there is not time or place in the rural school for all these things that are proposed, it may be answered that if the unnecessary secured for new subjects from the old curriculum is left out, and the remainder correlated with the newer subjects as it can and should be, the course of study will be even less crowded than it is at the present time. It will also be vastly more interesting to those who study and teach it, and of infinitely greater value to all our people. It will be the purpose in the following chapter to outline and discuss such a reorganized curriculum for the rural school as we have proposed.

FOR TEACHERS' DISCUSSION AND STUDY

1. What are the educational standards in your school community? Do the patrons desire a broad education for their children, or do they think the school which they themselves attended is good enough for their children?

2. The first thing necessary in carrying out any line of progress or reform is to make people *want* the improvements you seek to promote. How can you make the constituency of the rural school want a broader and richer curriculum?

3. How far does the picture drawn of the studies as taught in the old-time school apply to the rural school of

your locality? (For example, in arithmetic, geography, grammar, physiology.)

4. Compare the work and the play of an average country boy of to-day with the work and play of his father or his grandfather at the same age; make a similar comparison of the country girl's life with that of her mother or grandmother.

5. Trace the actual number of vocations outside the home now required to set the table for a family meal and compare with conditions a generation ago.

6. Make a list of all the farm boys you can discover who have gone through a town high school. How many of them returned to farming for a permanent vocation?

7. How many books suitable for the reading of children are contained in your school library? Can you form an accurate estimate of how many are available in each home represented in your school? Make a list of all the books each of your pupils can remember having read. What do the results suggest?

8. Could your school district afford to spend several hundred dollars in a school library and regularly appropriate fifty dollars a year for additions? How can the patrons be made to feel the *need* of such a step?

CHAPTER IV

THE REORGANIZED CURRICULUM

What, then, shall be taught in the rural schools? Shall we desert the time-honored fundamentals of reading, writing and arithmetic? Shall we teach the child how to test seed-corn, judge stock, garden and make boxes, but leave him helpless in the matter of spelling, geography and history? Is there danger that we shall become so enamored of the new that we shall forget the old?

There are many earnest people who fear these very things. But their fears are founded on an imperfect understanding of the spirit of the new education. No one who is intelligently seeking to reorganize the rural-school curriculum is willing to let go the fundamentals of education, the tools of knowledge which all must have. On the contrary, one of the great aims of the new ideal of the curriculum is to vitalize and make more perfect and usable the "three R's"—to fortify the work of reading that it may mean much more to the learner than it has meant under the older plan; to make the subject of arithmetic a thousand times more practical and useful than it has ever been before, and to increase the efficiency in its operations beyond what has obtained in the old type of schools. It is the purpose to put such interest into the matter of writ-

ing that the child will desire to write well because he has something that he wants to write; and in the subject of geography to make its dry bones live because clothed with subject-matter of vital interest and importance.

The method by which this is to be done is by first of all changing the method of organization within the curriculum—by changing the *center of emphasis*, in order that the matter to be learned may be approached more easily and naturally, and be related more closely to the life of the learner. Every one, old and young, knows from his experience, that we are more interested in the things that lie closest to our lives,—the activities in our home, the occupation that claims our attention, the vocation that we mean ultimately to enter on, than we are in mere abstractions. For example, with what zeal one will study even a railway time-table if he is about to make a journey! And, those who are planning a trip to Europe enter on a mastery of its geography and history far more thorough than they would ever attain if studying them as an assigned task. The boy who needs to learn the new rules of the ball game does not require some one to compel him to get his lesson; the necessity of his interest compels him.

The great thing, therefore, is to connect the work of the school so closely with the interests and activities of the home, its work and its play, that the incentives to study may be immediate and real. It is this immediate vital interest that saves the boy from becoming dull and disinterested, and the girl from becoming listless and inefficient in her work. Many a child has quit school before completing the course of study, not because he was compelled to stay out to work,

but because interest failed, owing to the lack of connection between his school work and his outside interests and activities. Many others have continued in school until they have obtained a smattering of what it had to teach, and later found little immediate use for what they had learned.

The aim, therefore, in reorganizing the rural school curriculum is to get a foundation of actual interest on which to build a mastery of the fundamentals of knowledge; and then to go on and add certain vital matter to the training of rural children which they have heretofore lacked. The purpose is to find in the daily lives and activities of the pupils the incentives that will lead to a better and more complete learning of the elementary branches, and in addition, so attach the pupils to the school and its work that they will desire to remain for a much more extended and helpful education than they are now receiving.

This fundamental basis of interest is easily found in the lives of the rural school pupils. For they all come from homes founded on the same type of occupation, and interested in the same industrial problems. In the town or city school, the pupils represent ten or twenty different occupations; but in the rural school they represent only the one industry of agriculture with its supplemental occupations. The homes are agricultural homes, the interests on the vocational side are agricultural interests. Therefore what will appeal to one group of pupils as an incentive to effort will appeal to all the others of the same community. Knowledge or skill adapted to use on one farm, will be adapted to use on the other farms of the locality.

These important facts make it possible to organize the curriculum of the rural school on a much more simple **Core of new curriculum** and practical basis than that of a town school. Nature study as related to the open country, agriculture adapted to the local needs and conditions, manual training of the type most related to the needs of the farm, home economics suited to the conditions of the farm home,—these are the basis of the rural-school curriculum, the core around which the other subjects are to be grouped. In these will be found the sources of the interests and incentives that will lead to the mastery of the branches constituting the tools of education. It is not, therefore, that these latter branches are to be omitted or neglected; they are only to be set in their proper relation to the interests and experience of the pupil. Only those parts of the old subjects that should plainly give way to more useful material are to be supplanted by the new. Not annihilation, but *reorganization* is what is proposed.

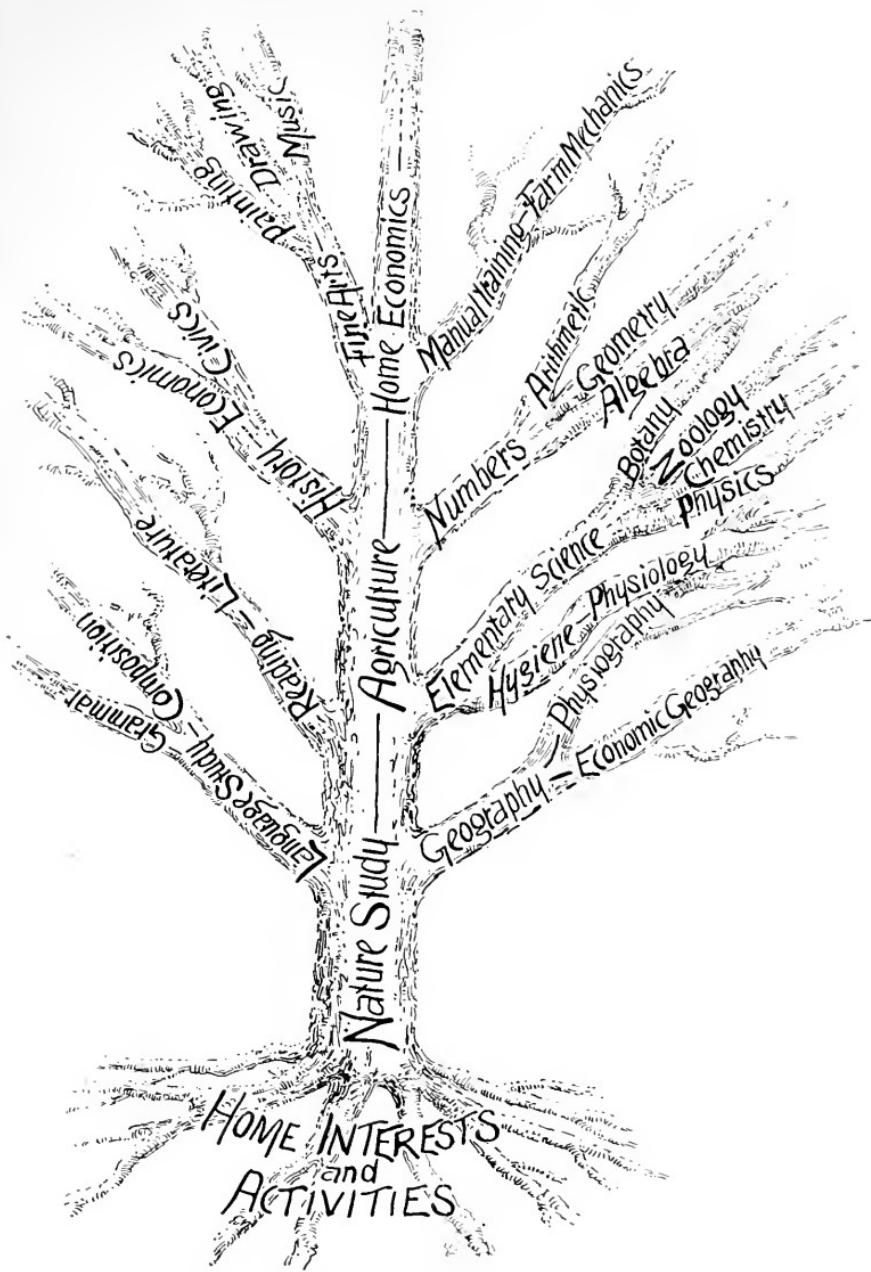
What shall be the plan of the reorganized rural-school curriculum? How shall it differ from the old curriculum **Plan of the new curriculum** on the one hand, and from the curriculum of town and city schools on the other? For it is clear that the old curriculum was faulty both in the meagerness of the material it offered, and the emphasis it put on the technical and theoretical as against the practical and concrete. And it is also evident that the curriculum best adapted for the city school is not the one for the rural school, where the interests and activities outside the school are entirely different.

While the interests related to the life and work of the farm or agriculture—nature study, stock raising, the

practical handicrafts and domestic science—will constitute the basis of the curriculum, this does not mean that vocational subjects alone not enough the work of the school is to be limited to these subjects. It rather signifies that they shall constitute the point of departure, the foundation of incentive, for the other studies. The country boy and girl can no more stop with these vocational subjects alone than the youth preparing for a trade can afford to study solely the mechanics of that trade without any knowledge of other things. It is to be remembered that the workers on the farm are men and women before they are farmers, and as such have a right to the help and inspiration that grow from a knowledge of the world's history, its literature, music and art; they demand and have a right to the broadening influence that comes from contact with the field of science and invention. In short, the men and women of the farm need as good an education as any other class of American citizens.

What, then, is to be the organization of the new curriculum? On what shall the child begin when he first enters school? How shall he proceed, and what shall he study from grade to grade?

Let us first answer in general, that under the reorganized curriculum the pupil will primarily study *things*, and only secondarily will he study *books*; and that he will actually *do* his lessons, in field or shop or home or garden, as well as sit at a desk and *learn* them. The new curriculum will change the point of emphasis from cramming the head with information, to applying the knowledge learned to one's actual life and work. For the only true way to learn a thing is to live it.



The new centre of correlation in the rural school curriculum consists of practical subjects



And this point of view will first of all influence the child's starting-point as he begins school. The old plan was to take him fresh from play and the activities of the home and the field, and placing him in a stiff seat with the admonition to "be quiet," set him at work learning *symbols*. His muscles, aching for the activity to which they are accustomed, cry out against the torture of their imprisonment. His mind, used to the stimulus of real problems and living interests, protests against the emptiness of the task which it is given. But regardless of the danger to his physical development from the incarceration in his prison-seat, and in spite of the equal danger to the development of his mental powers, he is required to submit; for he must "learn to read," and must study his "numbers" and his "language."

The result of this irrational method of introducing a child to his education is known to every observant teacher. At first the average child is alert and interested. The sheer novelty of the change from home to school stimulates him. His mind must be active on something, so it busies itself on the lessons prescribed, and he learns to read and number. This stage lasts a year or two and then comes the change. The novelty has worn off, school is no longer new, the teacher has ceased to be infallible, and the books have become a bore. The child loses interest in his work. He ceases to be bright and alert. If he is just an average child he becomes dull and fails to master his lessons; he does not like school and stays out on the smallest excuse. After a year or two more of desultory attendance he drops out of school for good, having reached about the fourth grade. If he is an exceptional child—one in ten or twenty—he survives the process we have

thrust on him and goes on until he completes the course. But the average child, and the child who is below the average, loses out; they become educational castaways. The tragedy of it! Dante says a tragedy is "a bad ending of a good beginning." And how many bad endings of good beginnings are we responsible for with our unnatural and senseless methods!

The new curriculum connects with home activities of centering all his energies on the symbols of reading and number as if they were the "chief end of man," he will simply continue the lines of activity already begun in the farm home. He will continue to observe nature, but with this difference; his observation will now be under the guidance and direction of a teacher and will therefore be *nature study*. He will continue his interest in the crops and animals of the farm; but because he is now under skilled instruction, he will be studying agriculture. He will continue to use his hands in the construction of objects or their pictures, but because he is now being taught how to make them, he is learning manual training or drawing. The girl will go on with her sewing, her cooking and her housekeeping, but she will be taught such methods and developed in such standards of doing these things that she will be studying domestic science. Not that the names *agriculture*, *manual training* and *domestic science*, will at the beginning be needed to describe what the children are taught, but the foundations of these very important subjects are being laid.

And the reading and the number and the language? We now come to them—the child now comes to them. In-

deed he may start these things from the first, but they *supplement* the real and concrete activities instead of *Reading, language and number follow* monopolizing all the child's time and effort. Nor will he learn to read any less rapidly than under the old system, for now he has an interest and an enthusiasm in his work that extends to all his studies. Besides, he now feels that he *needs* to know how to read, and write, and number. For there are the interesting things to be read about—the stories of the birds and the flowers and the people concerning whom he is learning; there are interesting things to write and tell about—things that he is doing in his nature study, his gardening, and all the rest. Here he naturally comes to enter on his language work; and there are the real necessities for numbering things—counting and adding and multiplying in the actual problems being met in his manual work, his concrete geography, his instruction in agriculture or the other real studies of the school.

All this is not to say that the child will learn to read without any care being given to reading, or that he will *Teaching of the fundamentals vital* not need to be taught arithmetic or instructed in the use of language. It is entirely certain that he will need the best of teaching in all these things, but the point is, that the teaching can *be* better, and that the child's interest in these formal studies will be stronger and more effective when they rest on a foundation of subjects that fit directly into the actual life and experience of the pupil. Not only is this truth in accord with the principles of good psychology, but it is being tested and proved in hundreds of schools which have dared step out of the well-known path of tradition into the highway of greater freedom and common sense in the reorganizing of their curricula.

Further, much valuable time is lost and interest destroyed by undertaking to teach the young child what he is not yet ready for, and what, at the proper time, he will apprehend easily and quickly, or even learn for himself. Think of all the time devoted to teaching six-year-old children the "number combinations," while the child's brain is yet undeveloped for the association processes required in such work! Let the boy or girl grow a little older, and find need for these "combinations," and they are learned as if by magic. If the teaching of number during the first two years in school is made incidental to other subjects, not neglecting it, but making it grow naturally out of the branches where it is needed, it is safe to say that the mastery of arithmetic will not suffer in the least. And such is the case also with formal language instruction, which should be an outgrowth of the work being done in nature study, geography, industrial work and the other concrete subjects of the school course, and not, at least in its earlier stages, a formal study in itself at all.

The principles just stated for first initiating a child into the work of the school will hold throughout the course. **Not discipline but efficiency the aim** taken in connection with the activities later to be entered on, should be the controlling factor. Not arithmetical tangles or grammatical complexities for the purpose of mental gymnastics, but living subjects that give the knowledge, develop the attitude and lead to the skill required by intelligent progressive men and women, must dominate the curriculum. For not an intangible veneer of culture nor a doubtful amount of discipline, but *efficiency in occupation* is the fundamental aim of the rural school. And on this foundation of efficiency a bet-

fer culture and a truer discipline than we have yet known will be built.

The most practical and natural starting-point for work in the rural school is *nature study*. For at the age when **Nature study the child's starting-point** the child first enters school he is most fully alive to his environment. His senses are at their best, his mind inquisitive, his interest keen in all that touches his life and its activities. He is an explorer, ready to enter on adventures of discovery in the rich world of nature that lies about him. Now is the time to lay the foundation for later work in geography, in agriculture, in hygiene, in science. Here is the basis for training in language, and here an endless number of rich themes for stories to be told or read or written, and for pictures to be drawn or painted.

In nature study also is the opportunity to teach an appreciation for the life of the open country. Because those who give their lives to agriculture must live in direct and immediate contact with the great out-of-doors, the rural school should especially seek to cultivate in the child a deep and reverent appreciation for nature in all her moods. The love of field and flower, joy in the songs of birds and the hum of bees, and delight in the waving green of corn and the gold of wheat, may not directly affect the yield of crops or the price of products. Yet they are one of the great compensations belonging to the worker of the soil and will add riches to any life.

One of the causes of desertion of the farm for the life of the city is the monotony and sameness of the work of **The penalty of blindness to beauty** the farm. How greatly could this be relieved if every boy and girl could learn to be interested in every changing phase of nature,

and come to enjoy its companionship! But to many of those who spend their lives in the country, the beauties of which the city dweller dreams and for which he longs while imprisoned in his narrow shop or office, have become a mere commonplace and possess no significance. The teeming hills are often looked on as but so many acres to be plowed or harvested; the sun setting in a blaze of glory only suggests milking time; and the multiform life around us is regarded solely in the light of its market value. Let the rural school teach the children of the farms to see beauty as well as profit in their environment, and much will have been done to cure the farm of its lack of attractiveness, and a great source of satisfaction and joy will have been added to the daily toil.

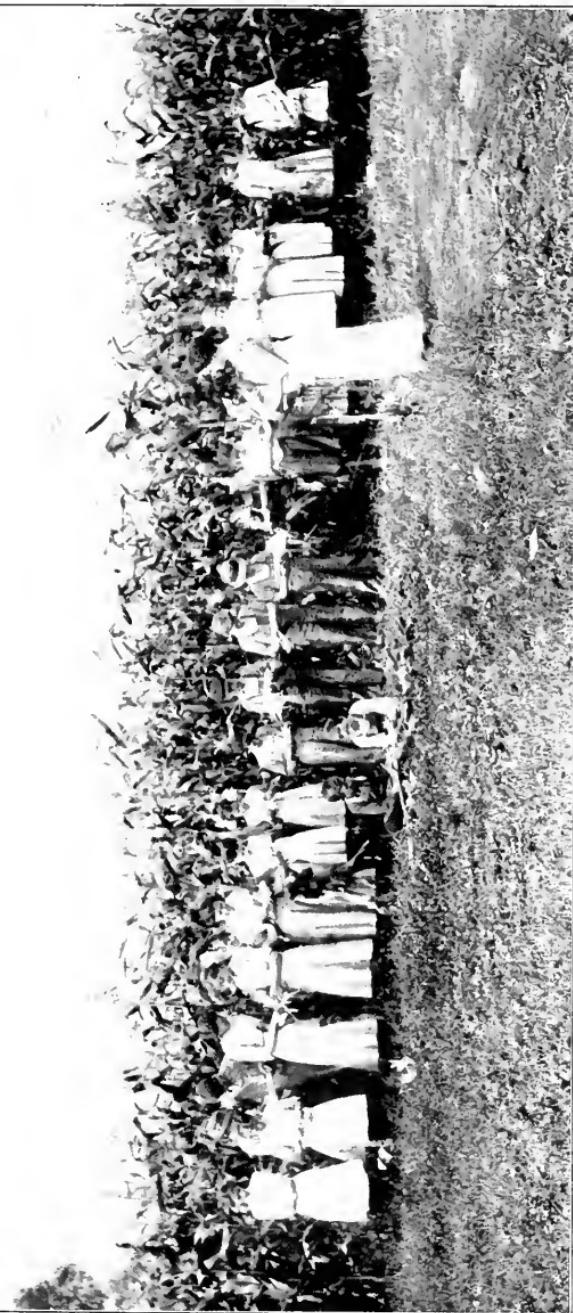
More concretely, the teaching of nature study will center about such aims as: (1) to give a first-hand knowledge of nature, that the child may come to understand and love it, and more fully obey its laws and claim its rewards; (2) to learn the useful and harmful in nature, as a guide to better hygienic living, and more successful farming; (3) to establish the basis for subsequent study of the natural sciences, including geography and agriculture, and to obtain a point of departure for the study of language.

Nature study is the basis for all the other branches that deal with our physical environment. Out of nature

Geography and agriculture have foundation in nature study study geography gradually emerges—not the catechetical geography of the older day, but the geography that tells of the earth as the home of man. Beginning wherever the experience of the pupils touches nature in their immediate environment, geography will proceed out to other parts of the home land and to other

Courtesy F. F. Heynway 'Ind.)

A practical lesson in agriculture



lands. What people live in each country, what they raise and eat and wear, the language they speak, the homes and schools they have, how they travel and work and play, what they send us for our use, and what we return to them—these are some of the topics the new geography will include.

Agriculture is a natural outgrowth of nature study. Indeed, a great part of nature study is agriculture under another guise. It has been objected that the elementary school can not hope to teach agriculture, but must perforce leave it for the high school. Of agriculture as an organized science this is true, but much valuable agriculture can be taught without a full mastery of its science. Said that great apostle of agriculture, Doctor Seaman A. Knapp, "Agriculture consists of one-eighth science, three-eighths art, and one-half business methods." The best proof, however, of what the rural school can do in agriculture is what it is now accomplishing in scores of schools scattered through many states. The children are learning the best modes of planting and cultivating crops, how to select seed, the rotation of crops, the harmful insects and weeds, the art of gardening, the raising of poultry, the care of stock and many other useful things. Practical agriculture is already an accomplished fact in the rural schools that have reorganized their curricula.

Home economics as a science is also beyond the age and grasp of the child in the elementary school. But, as in the

**Home economics
begun in the ele-
mentary school** subject of agriculture, there is much concrete and useful matter that can be better taught at this age than any other. The beginning of the art of sewing, the selection and care of foods, plain cooking, serving, the routine care of the home, nursing, the principles of decorating,

cleaning and keeping the house—these are more art than science and are wholly adapted to the work of the elementary school. Girls from the fifth to the eighth grades are at the stage of development when interest in the duties of the home should be taking root, and when girls should become a real help to their mothers in the care of the household. The time is therefore ripe for instruction along the line of these interests, and the opportunity is present for thus coordinating the work of the school and the home.

Personal habits and standards, one's attitude toward the care of the body, rules of living, methods of eating and sleeping and resting, are developed early in life. James tells us that such habits are well "set" by the time we have reached our middle teens. This fact gives one great reason, therefore, for making practical hygiene an important subject in the curriculum. And this instruction should have particular bearing on right living under the conditions imposed by the farm. Food, its different qualities and adaptability to seasons and the types of labor; the purity of drinking water; the hygiene of clothing, and its seasonal varieties; the relations of work, recreation and play; the care of the skin, nails, teeth and hair; the effects of tobacco in reducing physical efficiency; the more obvious facts bearing on the relation of bacteria to food and to disease; the means to be taken to protect against the common ailments or the spread of contagious diseases,—these are practical matters which every child can be taught without waiting for mastery of technical science as a foundation.

Manual training in its more technical aspects is not a

subject for the earlier grades of the elementary school, but should be left for the last two years, or even for the

Manual training a part of the curriculum high school, where the latter is available. Much valuable knowledge can, however, be given as early even as

the fifth grade. Boys can be taught the care and use of tools, the making of simpler articles for the farm or the home, the nature of the different woods, their availability for various uses, their finish and protection, and many other useful lines of information. The handling of tools in the school should result in every boy being supplied with a bench and a full complement of tools in the home shop, together with the different varieties of lumber needed for miscellaneous work about the house and barns.

Music and art to be included Music should constitute a part of the rural-school program. The country child has a full right to the finer aspects of culture. He will learn music as readily as the city child and enjoy it not less. Every schoolhouse should have a piano or an organ as a part of its equipment, and singing should be as carefully taught as any other subject. A practical method for the cultivation of appreciation for music is through the use of the "talking-machine," which can now be had at a very reasonable price, and which reproduces good music with artistic excellence.

Nor should the study of art be neglected,—not a study of the technical rules of painting, but training in the appreciation of good pictures. The great masterpieces are now available in excellent copies at very small prices, and should form a part of the course of study for every pupil. The result will be not only a love of art, but the introduction of worthy pictures into the home. In one west-

ern district where such study was taken up in the school, more than one hundred good pictures were framed in the school manual-training shop and hung in the homes of the pupils within one year.

The reorganized curriculum must give ample opportunity for the study of history. The man or woman of **History to deal with life of people** to-day is a part of the great civilization that had its beginnings in the far-away past and leads on to a limitless future. It is a part of education to come into close and vital relation with this civilization, to feel a kinship with great personages, to enter into great movements and events and feel one's self a part of the whole. This is to be done through a study of history. Nor should the history be of wars and politics alone, but should reveal the life and spirit of *peoples*, the growth of institutions, the rise of inventions, the development of wealth and industries. It should bring before us the lives of the great men and women of all times, the deeds they have done, the books they have written, the machines they have made, or the laws they have enacted. In short, history should unroll before the child a panorama of *life*, at its noblest and best, to serve as a stimulus to his ambition and a guide to his acts.

Practical civics should constitute an important part of the school course. This does not mean that the elementary pupil shall be required to study **Importance of concrete civics** the state and federal constitutions, or master the intricacies of the governmental machinery. Too much of this kind of matter has already been imposed on our children. The study of civics should begin at the points where the township, county, state or federal government touches the interests of the pupil. How the school is supported and controlled; how the bridges and

roads are built and repaired; the responsibility and duties of township and county officers; the work of health officers; quarantine regulations and their need; postal rules and regulations; the school law as related to pupils and patrons,—these and similar topics suggest what may well be taught the child in civics.

Such, then, is the basis of the reorganized curriculum, the core around which other work will center. Reading, language and arithmetic will not be neglected. Indeed, they will be more efficiently taught and better learned than in the old type of school, for the spirit and the motives will be changed. And what has been largely a mechanical task will become pregnant with interest and value.

FOR TEACHERS' DISCUSSION AND STUDY

1. Is there any danger that we shall become so interested in the newer subjects of agriculture, manual training and home economics that we shall neglect other subjects? How may we guard against such a result?
2. Make a list of all the occupations represented by the pupils of a rural school, and compare with a list of the occupations represented by the pupils of a town school. What bearing has the result on the possibility of vocational training in each type of school?
3. Have you known children who seemed bright and capable when they first entered school to become dull and listless after a year or two of attendance? How far is the school responsible for all such laggards?
4. Make a study of the reorganized curriculum as shown in the drawing of the tree. Then make another similar drawing representing the curriculum as is exists

in the old type of school. Compare the efficiency of the two methods of education.

5. Suppose a teacher agrees that nature study is the best point of departure in teaching the child but does not know enough about nature himself to make this method effective; what are the dangers to be guarded against? What is the remedy?

6. What use can be made of music to render the rural school and the life of the rural home more attractive? What percentage of children can with proper instruction be made fair singers? Would a piano be a good investment for a rural school? How many of your pupils have one in their homes?

7. Do you believe that good pictures can be made as educative as good literature? If you were asked to recommend pictures suitable for schoolroom decoration and study, what ones would you select? How would your list differ if you were recommending for the home?

8. Is it possible to lead children to like history? Do you count any teaching of history or literature a success that does not result in an interest in the subject? How much bearing has the teacher's own interest in any branch to do with the pupil's attitude toward it?

CHAPTER V.

CORRELATION

The curriculum has in recent years grown not only vastly richer and more interesting, but much fuller, as well. The broadening of education and the demand for studies of a more practical type have thus placed an increasing burden on both pupil and teacher. So much material has been added that the elementary course of study now includes a greater variety and amount of subject-matter than was required for admission to college several generations ago. And the high-school graduate of to-day has certainly been forced to cover more ground than was demanded to graduate from Harvard at the time when Longfellow was a member of the faculty.

The rural school has also felt the effect of this change. To the reading, arithmetic and writing of the earlier *Growth of rural-school curriculum*, geography was added, and then grammar. History soon found its way in, and was followed by physiology and that by language lessons. Then came nature study. Music and drawing next added their claims. And now come the formidable trio, agriculture, manual training and domestic science, each of which offers almost limitless opportunities for extension and subdivision. It is evident therefore that we have greatly enriched the curriculum and made it vastly more helpful; but we have also doubled and trebled the amount to be learned and taught.

It requires no argument to show that this expansion of the curriculum, which represents a true social demand

Danger of over-working teacher and pupil and not the theory of any group of educators, can not go on indefinitely.

There are those who say that we are already asking too much of the child, to the danger of his physical health and development. Certain it is, at least, that we have overwhelmed the rural teacher with the amount and variety of the work we have thrust on him. It is doubtful whether the rural child has been over-worked; he does not go to school regularly enough, and the school year is not long enough to injure his health. But there is grave danger in another direction: namely, that we shall attempt to teach him so much in so short a time that he will learn nothing well. It is possible to hurry pupils over so great an amount of matter that none of it is mastered. They may get a smattering of many fields of knowledge and still not know much about any particular field. They may learn to do a great variety of things indifferently, but fail to do anything well.

Nor is the remedy for this unfortunate situation to refuse the newer subjects admittance to the course of study.

Principles underlying revision of curriculum For this is in effect saying that the old school was good enough for our parents, therefore it is good enough for our children. Some are inclined to cry "fad" whenever anything new is proposed; but this is the essence of stagnation and fogyism. The better plan is to examine the curriculum with two questions in mind: (1) whether it contains any *matter that might well give way* to the new subjects proposed; and (2) whether by *improving the organization of the curriculum* we can not find a place

for the new without adding to the burdens of either learner or teacher. To put the matter concretely, agriculture, manual training and domestic science are insistently demanding a place in the rural-school curriculum of the present day. How can we find a place for them without injustice to pupil or teacher or to other necessary subjects?

The first phase of the question has already been answered in part in the foregoing chapter on the reorganized curriculum, where the possibility of eliminating much relatively useless matter was shown. Hence this topic need not again be discussed. But a not less important factor in the matter is that of introducing better organization into the curriculum through *correlation*.

Without concerning ourselves about a technical definition, we may say that correlation means *the combining or bringing together of different subjects, or parts of subjects, that are naturally related.* Thus certain parts of geography and history are most naturally and easily taught together. Language is usually better learned in connection with other subjects than when studied separately. Arithmetic naturally finds its most practical and helpful exercises in connection with agriculture, manual training, or some other concrete subject.

Such subjects as are thus related can be taught together, not only with great saving of time, but also with enormous increase of efficiency. A language exercise growing out of a lesson in cooking, a nature study excursion, or the testing of seed-corn performs the double service of training in expression while at the same time it

helps to carry out the work in domestic science, agriculture, or whatever else is under consideration. Similarly, a large part of the arithmetic required in the elementary school can best be taught in connection with the problems of the farm, the shop, the kitchen, or the school garden. And this method is both natural and right; for in the actual affairs outside the school the child never has the necessity of language exercises separated from the immediate necessity of expressing something that needs to be said; nor does he meet the need of working arithmetic problems of a fanciful and unreal sort, but rather those immediately connected with what he is doing on the farm or in the shop. The closer, therefore, we can keep language and number tied up with the real and concrete experiences of the child, the more efficient and useful will be his knowledge of them.

How great an incentive the concrete interests may become in leading to mastery was discovered by a manual-training teacher in a consolidated school. In the manual-training class was a boy of some thirteen years who was skilled in the use of his fingers but indifferent to arithmetic and mechanical drawing. One day Joe came to his teacher, all excitement. If Joe would make the body of a runabout in the manual-training shop, his father would purchase the running gear and engine and give him the machine. But the teacher demurred at the request that he start at once on the work. He said to Joe, "You know you can not do the required drawing and computations for this job. You don't know your arithmetic well enough, and you are careless in your drawing." Joe was disappointed, but not discouraged. So he made this tentative proposition to his teacher: "Suppose I *do* get my arithmetic

and drawing?" "When you have done that satisfactorily," promised the teacher, "I will see you through the construction." That was enough; Joe now needed these branches in his business, and he went to work at them. He made arithmetic and drawing the great aim of his life; he figured constructions, drew to scale, and kept on figuring and drawing until he was fully master of all that was required for the work in hand. Then his teacher started him upon the automobile, and Joe is to-day driving it with great pride. But better still, Joe has kept up his interest in arithmetic and drawing, and is now leader of his class in both of these subjects. What Joe needed, and what many another boy needs, is an immediate incentive for his work growing out of some interesting activities of his daily life; this is to say that he needs better correlation in his work.

Correlation can not be forced. The subjects or topics put together must naturally belong together, and must grow clearer and more interesting and practical for their union. The actual life and experience of the child is really the basis of all true correlation; things that the child finds belonging together in his activities can well be put together in teaching him. But no amount of combining or relating except as these relations are clearly seen by the pupil and felt by him to be natural and right will serve; for false correlation may be as artificial as the method that ignores all correlation, and therefore only result in jumble and confusion.

An amusing illustration of an attempt at forced correlation was heard in a school where the teacher had come to know just enough of correlation to make it a fad, but not enough fully to comprehend it. She had learned that

nature study is a good basis for correlation, but did not understand how to use it for this purpose. On a certain day the class was to study the grasshopper; so everything in the school from morning till night concerned grasshoppers. The morning scripture-lesson was chosen from the twelfth chapter of *Ecclesiastes*, in which the writer, drawing a picture of the weakness of age says, "And the grasshopper shall be a burden." Special emphasis was placed on this statement, and the weight of a grasshopper estimated. The arithmetic lesson consisted of the solution of problems having to do with the number of legs so many grasshoppers would have, and the number of jumps required for a grasshopper to travel such and such a distance. The spelling lesson dealt wholly with the names of the parts of the grasshopper. The language lesson was made up of grasshopper stories. The drawing lesson consisted of pictures of grasshoppers. For general exercises the teacher told a story of great plagues of grasshoppers visiting different sections of the country. And for a geography lesson, the grasshopper region of early days in the Middle West was considered. In fact this was a grasshopper day in the school. The children read grasshoppers, talked grasshoppers and thought grasshoppers from morning until night. The teacher prided herself that she was using the "method of correlation," whereas she was only wasting time on a ridiculous device possessing neither value nor sense. The trouble was that grasshoppers were not naturally related in any way to the experience of the pupils, but *were forced on them*. There was no natural basis for the correlations made. Attempts at correlation just as fruitless, if not so ludicrous, are not uncommon.

The reason why nature study, gardening, cooking, corn-

judging, the handicrafts and school excursions are the best basis for correlation is that they involve practical Immediate interests the natural basis of correlation and immediate interests, and supply the necessity for language, spelling, arithmetic, drawing, etc. The boy who is interested in an experiment in corn raising, or the girl who is interested in cooking a new kind of dish, will naturally desire to tell about it; here, then, is the opportunity for a language lesson. For the first thing necessary in learning either to write or speak is *to have something to say that one really wants to express to others*. Similarly, if the pupils are at work in manual training or domestic science, there will be mathematical relations to solve; this gives the best basis for the teaching of a practical and concrete arithmetic. If the child is making a box he needs arithmetic and drawing; his own experience and desire will demand them. Therefore arithmetic and drawing naturally and easily correlate with these subjects. If he is testing seed-corn or computing the waste in uncleared clover-seed, he must know fractions and percentage in order to solve and state his practical problem; the best teaching of fractions and percentage that he can possibly have, therefore, is that connected with these real experiences. And so we might go on multiplying illustrations of this principle among the other school subjects; much of geography and history are vitally related and can be best taught and understood by having this relation made clear and explicit; and not a small proportion of our literature is closely connected with historical events, with the forms of nature round about us, or with experiences common to daily life. It is at such points as these that correlation is both natural and necessary.

Two great reasons, then, for making use of the principle of correlation in the rural school are: (1) correlation saves time, and (2) it makes the matter learned both more useful and more interesting.

The amount of time that can be saved by skilfully correlating language, spelling and arithmetic with nature

Saving time through correlation study, domestic science and agriculture is an important factor in making use of the modern curriculum. Time

must be saved somewhere if we are to take advantage of many new things now available for the education of our children; and it can be saved in this way, not only without loss, but with positive gain. If the skilful nature-study teacher makes a part of the lesson a written or oral description of what the child sees or does in the lesson, and at the same time gives attention to the form of expression, there will be little need for a formal language lesson on this day. Two birds have been killed with the one stone; the description helped in the nature lesson and it was also in the truest sense a language lesson, since it was based on real experience. Similarly, language can be taught in connection with geography, history, or any other subject, providing the teacher does not become careless and neglect the matter of expression while teaching the facts involved in the lesson. Likewise most of the spelling classes could well be dispensed with, and not a few of the arithmetic lessons combined with the practical work of agriculture, manual training and domestic science. And this would all result in a saving of time for both teacher and pupil.

This method also greatly increases the efficiency of the pupil by making his knowledge more practical and usable.

It is so easy to learn a set of facts divorced from any immediate need for them, and then when the need arises, Correlation leads to efficiency not know how to apply the facts. In proof of this, how many children there are who can work the hard problems of the arithmetic text, but can not solve the practical problems of the household accounts or compute the value of the farm crops! The arithmetic they learned lacked correlation with actual affairs. There are many who can spell well from the spelling-book, but who strew misspelled words thickly over their written pages; their spelling failed of correlation with the practical needs of spelling. There are many who can glibly recite the rules for grammar and punctuation, but who violate them freely in actual usage; they need to learn the rules, not as so much separate information, but in connection with the necessity for putting them into practise in every-day speech and writing.

It is manifestly impossible in the space available to outline any complete plan of correlation. A few suggestions taken from the work of successful rural teachers will, however, show some of the practical applications of correlation that can be made in the rural school:

The nature-study lesson was on birds, and pictures in natural colors of several birds native to the region, such Correlation with basis of nature study as the bluebird, the robin, the barn swallow and the woodpecker, were brought before the class and studied and discussed. An observation lesson was then assigned, each child seeking to discover one or more of the birds described, and to study its appearance, flight, habits, and, if possible, nesting place. Besides affording excellent training in observation this supplied the basis for both

oral and written language lessons of the most interesting kind.

The next thing taken up was the range or area of country each family of birds appropriates for its home. The bluebird was found to range over the whole United States west as far as Colorado, and to winter in the southern part of North America; it was discovered that the robin inhabits all the United States except the gulf states, and so on. This phase of the study at once brought in the necessity for geography, and the map came into use to find where the birds live. The climate naturally required discussion to determine why the barn swallow is not found in the South Atlantic states, nor the bluebird in the western states. The study of the food of the birds showed that sixty per cent. of the bluebird's diet is made up of grasshoppers, beetles, caterpillars and the like, and that thirty-two per cent. is vegetable food, chiefly wild berries; that the robin's food is about half worms and insects, many of which are harmful; that the barn swallow's tireless darting flight is a relentless war on winged insects, more than one-third of which are flies; and that the woodpecker lives chiefly on a diet of harmful orchard insects.

So seemingly simple a series of nature-study lessons as these, touched a marvelously wide range of interests both in and out of school. The birds themselves were worth studying as a part of the great world of nature, but their study at once led into other fields, and language, both oral and written, geography, agriculture and drawing were all naturally reached from this starting-point. For several days the children vied with one another in giving interesting descriptions and narrations based on

**Points of contact
reached through
nature study**

their observations or study. Geographical locations, distances and directions were learned. Climatic conditions in different parts of the country were noticed, and the insect life and vegetation of various regions investigated. The relation to crops was made clear, and the pupils were taught to protect the birds instead of destroying them.

A further study of birds revealed the astonishing fact that the stomachs of flickers have been found to contain

A lesson on birds at one time from three thousand to five thousand ants; that one cuckoo's stomach has been the receptacle for two hundred and fifty American tent caterpillars, and another's stomach for two hundred and seventeen fall webworms; that one day's feeding of a nest of four young chipping sparrows disposed of two hundred and thirty-eight insects, nearly all of which were harmful. Where accurate or approximate figures such as these are available, there is no end of material for practical arithmetic as related to agriculture, thus naturally correlating number work with nature study, while showing the economic value of birds.

Another teacher of seventh or eighth grade boys was discussing with them in the agriculture class the best type

Correlation with agriculture as a basis of corn-cribs for the farm. Each boy was asked to make careful measurements of the home cribs, and also to bring drawings of them. The drawings were compared and discussed, and the faulty constructions criticized. Growing out of this, naturally arose the question of the capacity of the different cribs, and some very valuable lessons in farm arithmetic followed. Before this work ended every boy in the class knew the shortest and most practical methods of computing the capacity of corn-

cribs and could easily and quickly measure any crib and tell how many bushels it contained. One farmer was about to build a new crib. He became interested in the work being done by the boys, and came over to the school to seek suggestions and advice, and finally decided to put up a crib of the new and approved type. The class, under the direction of the teacher, made the estimate of lumber for his crib, figured the cost, and told him just how many bushels it would hold. When the crib was under construction, the class made several visits of inspection to study the details. Three things were accomplished: the boys learned how to build corn-cribs; they mastered more really valuable arithmetic than is sometimes learned in a whole term; and they gained a strong friend for the school by being able to offer practical help to the farmer.

With the many concrete problems necessarily arising in connection with the practical work in agriculture, in Agriculture and manual training and in home economics, there is small use for systematically plodding through all the problems and the ordinary text-book in arithmetic. Most texts in arithmetic are constructed with other occupations than farming in mind, and the problems have little relation to matters that the pupils know about or will ever have to meet. But even if we had a practical farm arithmetic, with the problems based on the computations relating to crops, stock, barns, ditches, fences and the like, it would still be better to make the greater part of the work grow immediately out of the concrete activities being carried on by the pupils themselves in the home and the school.

In a class in home economics in a consolidated school the matter of artistic designs in wall-paper was under

discussion. It was discovered that nearly every girl in the class came from a home where papering was soon to

Correlation with a basis of home economics be done. Here, then, was the opportunity to correlate the work in home

economics, art and arithmetic. Designs for the paper of different rooms, such as bedrooms, living-rooms and parlors, were made as a part of the study in drawing and art, and sent to a near-by dealer, who supplied samples as nearly like the designs as possible, to be studied at the school. Rooms were measured, the required amount of paper was computed, and the cost of papering each different room was found. The class worked at the problems involved with great interest, and soon found themselves able, not only to determine the types of paper best suited for various rooms, but also to find the cost accurately and quickly. This line of study naturally led to the question of paints and varnishes, and much useful information was gathered concerning the composition and value of different brands. Color schemes for individual rooms were worked out, and suitable carpets, rugs and curtains decided on. In each case materials and cost were taken into account, the girls learning many new facts concerning textiles and coloring stuffs, and developing ability in household arithmetic.

One county in Indiana has for several years used no regular text-book in geography below the seventh grade.

Geography and correlation Yet under the direction of a wise superintendent, this subject has been taught with unusual success. The children have been systematically set at work to discover the geographical data of their vicinities. Fields, forests, rivers, hills and ravines have been explored. Springs have been investi-

gated, marshes surveyed, and clay beds and stone-quarries located and examined. The nature of the soil has been determined and the topography of the county studied. The different agricultural products have been analyzed and a comparison made with the output of the factories. All the various sources of wealth have been considered, and a list made of the leading industries. A census of the people of the county has been undertaken by nationalities and occupations. In short, the study of geography has been made so immediate and concrete that it has become a source of inspiration and delight in the schools. And when the text-books are taken up for the study of other regions and peoples, the descriptions possess a reality and interest which, without the practical correlation of geography with life, they could never have had. The entire subject has taken on a new meaning because it is connected with life and experience. Out of this new geography also have come scores of themes for lessons in language and composition, and countless problems in concrete arithmetic, besides many fruitful topics for the study of local history and civics.

Teachers who have adopted a practical sane system of correlation for the work of their schools have everywhere remarked on the vitality and enthusiasm that have followed in the school. Especially has it relieved the deadness and drudgery of language study. Says the Honorable A. B. Martin, of the United States Department of Agriculture: "Some of the best essays I have ever read and some of the best speeches I have ever heard have been by the corn-club boys on the subject: 'How I grew my acre of corn.'" An Arkansas corn-club boy wrote an essay that the professors in the state agricultural college pronounced one of the best papers on corn produc-

tion they had ever seen. This paper, written by a schoolboy, was printed by thousands and distributed as a guide to corn growing. The great trouble in most composition work is not lack of knowledge of language forms, but poverty of ideas to express, and the absence of motives prompting expression.

It must be understood, however, that a helpful correlation of school and home work such as we have described can be accomplished only by the teacher who possesses a wide range of practical knowledge, and untiring zeal and industry. The teacher must have mastered the whole field of study covered by the school curriculum, and have a broad background of information besides. He must also know the industries and activities of the farm, and the special interests and needs of his particular community. He must be at home in the great out-of-doors, and not a mere master of text-books; and he must be willing to devote time, thought and energy to the upbuilding of his work. Such a teacher will find rare satisfaction and compensation in the opportunities for larger helpfulness offered through the rational correlation of school studies.

Correlation requires expert teaching

FOR TEACHERS' DISCUSSION AND STUDY

1. Departmental teaching such as is now the rule in the high school is being extended into the upper grades of the town school. Will not the multiplication of subjects soon make this necessary in the rural schools as well? Is there any possibility of bringing such an arrangement about except by means of consolidated schools?

2. How will the actual basis for correlation in the

curriculum vary in different parts of the country? (Occupation, home interests, etc.)

3. Have you ever known a boy who lacked interest in his home work suddenly to become enthusiastic in it when given some personal share in the returns? How may this principle be applied in the work of the school?

4. The term "learned ignoramus" was recently used in describing a certain person who had received much schooling, but lacked practical ability. How is the situation involved in this case related to this chapter?

5. Is there danger in seeking to correlate the different studies that some important subjects will be neglected? How can such danger be avoided?

6. Try working out a plan for a week's lessons, using nature study as a basis. Using agriculture as a basis. Using domestic science as a basis. Using manual training as a basis. Which subject has the largest number of points of contact with other studies?

7. Consider your own school program and determine whether you could reduce the number of daily recitations by means of better correlation. What subjects will be the first to drop out?

8. Similarly consider the probable increase in the interest and value of the school work that would follow effective correlation.

CHAPTER VI

VOCATIONAL TRAINING

Rural children have almost everywhere been quitting school as soon as compulsory education laws would permit, and in thousands of cases have dropped out in defiance of the law. Educators and public-spirited people are gravely concerned over this exodus, as they may well be. But is it surprising that the children should drop out? What with inexperienced teaching and poor equipment, the conditions in the rural school have not been inspiring at best; but added to this, the curriculum has been at fault; the studies have been such that the pupils have failed to see any close relation between the lessons studied in their books and what life required of them outside of school. Reared in the freedom of the country, they have felt the call of the open, but they have been wholly tied down in their school work within the four walls of a dingy and uninviting building. Interested in growing things, in crops and cattle and horses, they have been given a mental pabulum of conjugations and declensions, of dates and definitions, of rules and classifications. Feeling the pressure of real problems and duties resting on them, they have been put off with empty drill in mental gymnastics, in the dim hope that in some way this process might help them to meet their responsibilities. Small wonder that they have rebelled against the school and sought relief

from such irksome tasks in the real affairs of every-day life.

The attitude resulting in the desertion of the rural school before completing its course can never be changed. Remedy lies in by lecturing to the children on the advantages of an education. The remedy is deeper than this; it lies in *making the school work an actual part of the pupils' lives*, and its lessons so valuable that they can not afford to miss them. In other words, the rural school should be made into a vocational school, and thus related immediately to the activities of the farm. This does not mean that nothing but agriculture and the industrial arts shall be taught in the rural school; but rather that these things shall afford the point of contact between the school work and the home life and interests of the pupils, and shall shape the mode of approach to all other subjects of study.

This close relation between the study interests and the home interests is especially necessary in the rural school.

Difference in attitude of rural and city child For the children of the farm begin work at a relatively early age, and have come to realize its value and feel its responsibilities long before the city child thinks of engaging in any occupation outside of school hours. The result is that the rural child develops a practical turn of mind, and has a tendency to look on education if its practical trend is not evident with an impatience that is not felt by his urban cousin. The city child is not engaged on anything in particular outside the school, and hence has no definite measure of the immediate interest and value of his education; the country child is doing real things, and confronting actual problems, and hence has a constant tendency to compare the worth of the time spent

in school with the time spent outside of school. Without being wholly conscious of it himself, he demands practical results from his education.

The movement for vocational education in this country is now in full swing. Six states—Massachusetts, New York, Connecticut, New Jersey, Wisconsin and Indiana—now have more or less complete systems of vocational instruction. The newer education which they are so successfully introducing is not meant to replace the old, but to supplement it, by giving training for a specific employment in addition to the regular school studies. Elementary instruction in agriculture is now required in the schools of nearly half the states, and the movement is extending with every session of the legislatures. It is safe to conclude that the next few years will see vocational training a part of the regular education of a very large proportion of all our industrial workers.

The rural school has an exceptional responsibility in carrying out its share of this new problem. Until recent years agricultural production has been able to keep pace with the increased food demands of our growing cities. As the hungry mouths multiplied in number, new areas were put under the plow, and more corn and wheat raised. Modern machines made it easy to cultivate the added acres, which the government supplied; so there was no reason to husband the resources of the soil. It was natural that much waste should occur under such a system; the only thought was immediate returns, and these were not always intelligently sought. But with much of the most fertile land greatly exhausted by improper methods of cultivation, and with the free public lands all gone, conditions have

greatly changed. The value of land has constantly mounted, and the price of produce has steadily risen. The old wasteful methods will no longer do. An important part of the conservation of our resources is the education of the boys of the farms for the great industry on which they are to engage. They must be trained for their vocation, and not left to learn by costly mistakes what they may easily be taught by simple instruction in the course of their education. *The rural schools must prepare for the vocation of agriculture.*

It is argued by many that the rural schools are not equal to this additional burden. It is said that the **Rural school equal** teachers are not prepared to teach **to the task** these subjects, nor are the schools equipped for teaching them. This is all too true of a large proportion of the rural schools of the present; but it is not true of them all, and the conditions are rapidly changing for the better. Thousands of teachers are studying the new subjects in summer schools, or taking time off to master them; and other thousands about to enter on teaching are now having an opportunity to prepare in the vocational subjects as a part of their own education. Many rural schools are equipping for the teaching of the newer branches and others stand ready to act whenever conditions are ripe for the introduction of the vocational lines of work. The question is no longer whether we shall introduce the vocational subjects into rural education, but how can it best be done.

One point is clear with reference to the introduction of agriculture and allied subjects into the rural schools: **Vocational studies** these branches must be taught as practical, applied subjects, and not as so many detached facts or so much class-room theory. The



A manual training class and what it made. At the left is the teacher, next to him is the janitor. What this class made out of school hours could have been sold for one hundred dollars



A high school class at work in an Agricultural Laboratory



work in agriculture must involve real practise with the planting and growing of crops, the care and breeding of stock, and the understanding and handling of soil. The course must not be merely a text-book course, but must make the text-book a means of studying and interpreting plants and animals under actual farm conditions. Similarly, work in manual training must not deal with abstractions, nor must the shop exercises bear chiefly on lines of construction foreign to the farm and its surroundings. Skill with tools can be obtained from work on articles required on the farm, as well as from the making of bric-à-brac. The course in domestic science must keep in mind the farmhouse and rural conditions, and adapt its work to meet these needs. For only in such ways can the new branches from which so much is expected toward revitalizing the rural schools accomplish what is demanded of them. Agriculture, manual training and domestic science are not a panacea for the ills of rural education. There is no magic in any one of these branches except as it is related directly to the life and needs of the pupils. Agriculture taught from a text-book in the hands of a teacher unacquainted with living plants and animals might easily become as dead and uninteresting as a list of conjugations or a column of historical dates. Domestic science presented as a set of rules and abstract principles is not superior to scientific classifications or linguistic inflections as a subject of study. It finds its true value only when immediately related to the experience and problems of the learner.

Some have considered practical agriculture an impossible subject in rural schools because of lack of ground
Rural school limit- for the planting and raising of crops
tations and absence of facilities for the study-

ing of farm animals. In addition, the school runs not more than eight or nine months a year, and leaves the school agricultural projects without care at the very time when attention is most needed and when observation would be most instructive.

There is much force in this argument, and the difficulties of conducting demonstration and experimental work at the school are not exaggerated. Yet this does not mean that the whole project must fall through. For there are different ways of arriving at the same results.

In the first place, some phases of instruction can be easily and effectively carried on in the school itself, even Possibilities of in the one-room district school with one-room school its meager equipment. The selection and care of seed-corn, and the methods of testing it, require very little apparatus, almost no expense, and practically no additional room. Similarly the testing of clover and timothy seed for freedom from noxious weeds, the method of treating seed oats to prevent rust, etc., can easily be accomplished. Soils can be examined and compared and tested and their suitability to different crops determined. With the cooperation of the farmers of the community and experts from the agricultural schools, special stock-and-grain-judging contests can be held. All these things and many others which lie at the very foundation of successful farming, require not special laboratories and equipment, but only knowledge, determination and willingness to work on the part of the teacher. They are wholly within the reach of the humblest district school, and need be hardly less effective and thorough there than in the larger school.

The range of agricultural instruction possible to the rural school is not limited, however, to the resources of the school premises. The adjoining farms, fields and flocks vastly extend the scope of the school laboratory. The seed-corn being planted on a neighboring field; the stand of corn on the farms along the road; the history of the rotation of crops in the neighborhood; the rust on Farmer Smith's oats and the smut on Farmer Brown's corn; the farm animals in adjacent pastures or barn-yards—these are all as easily available for study as if they were a part of the equipment of the school, and have the advantage of being entirely real and concrete problems.

Once the neighborhood becomes interested in the school's work in agriculture, there is no end to the assistance that will be willingly and gladly rendered by the patrons. Various rural schools in Minnesota have found it possible to install Babcock milk-testers, the children bringing samples of milk from the farm for the purpose of the test, and taking the results of the test home as measures of the different cows of the herd. In another community each of several families gladly contributed a sitting hen for experimental study of chicken-raising at the school. The hens were set in coops made in the manual-training shop of the school according to models supplied by the state agricultural college. When the chicks were hatched the entire school day by day studied their growth. Each brood was fed a different ration prescribed by agricultural experts for a test of feeding. Other details of care and management were varied, and a comparison of results was made. The outcome of these experiments was the doubling of the poultry industry in the community, and

the application of methods that greatly increased the profits. Better still, the children were scientifically instructed in a paying industry, their interest in both the school and the farm was strengthened, and the school and the home were more closely related.

One of the most promising fields for the development of rural vocational training is what is coming to be known "Home project" as *home project* study. The aim is to work interest the pupil in home industrial work, for which, when satisfactorily completed, school credit is given. There are two distinct plans in operation, the difference being chiefly with reference (1) to the character of the home work for which school credit is given, and (2) the relation of the school to the direction or oversight of the work carried on at home.

Under the first plan, which originated in Massachusetts and has now been widely adopted by individual schools throughout the country, each pupil, with the advice of his teacher, selects some definite piece of work to be done at home, in part under the direction and supervision of the school. The work selected must be of such character that it can be carried through from beginning to completion by the pupil, who is required to pursue supplementary reading and study on his home project as a part of the school work. The teacher or a special supervisor occasionally visits the home, inspects the pupil's work, and gives necessary suggestions or directions. The consent of the parents for the pupil to take up the project must be obtained, and their hearty cooperation assured. In Massachusetts the work on the project, together with the reading and study necessary to carry it out, requires about one-half of the pupil's time.

Among the home projects being successfully under-



Judging poultry at a Rural School



Coop and brooder made by boys of the Manual Training Department of a Consolidated School



taken by either boys or girls are the following: The raising and care of a pen of poultry; planting and cultivating a section of a vegetable garden; caring for and picking the fruit from a part of an orchard; setting out and cultivating a patch of berries; preparing the ground for, planting, cultivating and harvesting a specified crop of potatoes or corn; caring for one or two cows, including the feeding of a specified ration, cleaning, milking and testing the milk; the feeding of a pen of pigs; the building of a chicken house, porch or sidewalk; the canning of a crop of tomatoes, berries, or fruit; the doing of a specific phase of household work, such as setting the table, serving the meals, making beds, cleaning and dusting; planning, cutting and making garments, etc.

The coordination of school and home work has proved effective wherever it has been fairly tried. True, Success attained it entails additional work on the teacher, particularly where there are no special supervisors to have general oversight of the home work; for it requires that the teacher shall occasionally visit the home for the inspection of the pupil's work. The advantages arising from the better spirit of cooperation and study in the school, and from the loyal support of the school by the homes, however, far outweigh the added requirements placed on the teacher. Work of this nature can be instituted in almost any rural school in the United States, providing the teacher is fully prepared for his part in the project, and enters into the spirit of the work with enthusiasm and tact. It need hardly be said that such a plan would be worse than a failure where the teacher lacks the knowledge, interest or tact requisite for so delicate an under-

taking as to supervise work done by the child at his home, and credit it as a part of his school requirement.

The second plan differs from the first in not requiring oversight of the home work by the school, in not

Home projects without super-vision demanding reading and study along the line of home work being carried out, and in allowing a perfectly free

range of choice of the home work to be done. The aim under this plan is to encourage the pupil to help in the regular work, doing his part faithfully and well. There is no direct attempt to make the work educative, except as all work well performed is educative, or as the child may receive instruction from the parent. Hence no attempt is made to correlate the home work with the work of the school. The parents are given the responsibility of judging the quantity and quality of the work done, and must report their judgment to the teacher, who assigns proper credit to the pupil toward completing his course in the school.

This plan is in successful operation in many sections throughout the United States, but has been more fully

The Oregon plan developed and followed in the state of Oregon than elsewhere. State

Superintendent L. R. Alderman says of the project: "The plan costs no money, will take but little school time, and can be put into operation in every part of the state at once. It will create a demand for expert instruction later on. It is to give school-credit for industrial work done at home. The mother and father are to be recognized as teachers, and the school-teacher put into the position of one who cares about the habits and tastes of the whole child. Then the teacher and the parents will have much in common."

Among the home duties for which school credit is given to boys on the report of the parent are: Building the Rating the pupil morning fires, feeding stock, milking, cleaning horses, caring for poultry, providing fuel. Credit work for girls includes sweeping, dusting, washing dishes, serving or setting the table, bread or cake making, sewing and ironing. Other subjects may be added by the parents if the work is regularly done by the pupil. In rating the pupil for the term or year, the industrial work carried on in the home is usually counted the equivalent of one subject pursued by the pupil in school, and credit is given on this basis.

Perhaps the most important factor recently introduced into rural vocational education is the agricultural club The "agricultural club" movement movement, which is becoming more closely affiliated with the work of the rural schools every year. It is safe to say that club work will become a definite part of the school program in thousands of rural schools within the next few years. The growth of agricultural clubs throughout the United States has been more rapid during the last year than at any former time, and the promise for the future is even more encouraging.

The first agricultural clubs were those established some sixteen years ago in Pennsylvania, Illinois, Iowa and other middle western states. These were not definitely connected with the schools, and existed as district, county or state clubs, usually organized under the auspices of a state agricultural college. The national club organization began in 1907 in Mississippi, under W. H. Smith, now state supervisor of rural schools of that state. The first clubs organized were corn clubs for boys ten to eighteen years of age. They enrolled one hundred and sixty-two

members the first year. This number had grown to one hundred thousand boys in corn clubs in the southern states in 1912. Girls' garden and canning clubs were first organized in 1910 in South Carolina and Virginia. There were three hundred and twenty-five girls enrolled the first year, the number increasing to thirty thousand in 1912. In addition to the corn and garden clubs in the South, cotton clubs, potato clubs, poultry clubs, etc., have also been established and are rapidly growing.

The United States Department of Agriculture has now definitely taken up boys' and girls' club work as one of **Department of agriculture and clubs** its activities, and almost a million dollars a year is being spent to promote agricultural education through this agency. Club work, so successful in the South, has been extended into the northern states. Sixteen states are now organized for national club work in cooperation with the Office of Farm Management of the Department of Agriculture. The work of the club is usually initiated through the schools, and is being made a definite part of the school program in many places. Special instructions are furnished all members in accordance with the nature of the work, lectures are given under the auspices of the club by agricultural experts, contests are held and prizes awarded.

The national club organization under the direction of O. H. Benson, specialist in charge, is at present affiliating with it the various state and local clubs, and the movement will be extended until it has embraced every state. There are already some sixty specialists and agents now giving all or the greater portion of their time to this work. The cooperation of rural schools is everywhere being sought and encouraged, and valuable assistance rendered to make the work a success as a part of rural education.

Success of the club movement Boys and girls in all parts of the country have responded enthusiastically to the club idea, and have shown marvelous results from their experiments and work. In states where the average yield of corn on the farm is from twenty to forty bushels the corn clubs have succeeded in producing from seventy-five to over two hundred bushels from an acre. Garden clubs, chicken clubs, canning clubs, cotton clubs and various other kinds of clubs have shown the same enterprise and ability to produce results through the use of the better methods learned in connection with the club work.

The following table shows the list of prize winners in the corn club of the northern and western states for 1912, **Club prize winners** with the results obtained from one acre of ground. Each of the boys was given a free trip to Washington as a prize, the expenses being paid by various interested individuals, bankers' associations, chambers of commerce, congressmen, senators and others:

STATE	NAME	ADDRESS	Yield Bushels	Cost Per Bushel
Maryland.....	Leroy Nichols	Highland	150.00	\$.1333
Kentucky	Lester Bryant	Rockfield.....	148.55	.1275
Iowa	Earl Zeller.....	Cooper.....	141.45	.0975
West Virginia.....	Ethan Allen.....	Morgantown.....	140.20	.2500
Massachusetts.....	Ernest Russell.....	South Hadley.....	68.90	.7000
Illinois.....	Hosea Cornwell.....	Newman.....	150.45	.2940
Illinois.....	Herman Rucker.....	Decatur.....	145.41	
Illinois.....	Ivan Houser.....	Farmer City.....	122.60	.1241
Illinois.....	Leon Kelley.....	Monticello.....	119.25	.3000
Illinois.....	Wm. Southward.....	Kinmundy.....	117.75	
Illinois.....	Leo Miller.....	Springfield.....	112.48	
Illinois.....	Robert Reeder.....	Mendota.....	111.50	
Illinois.....	Ivan Goble.....	Charleston.....	108.59	.2030
Illinois.....	Glen H. Gordon.....	Urbana.....	107.50	.2265
Illinois.....	Robert Michael.....	Assumption.....	106.11	
Illinois.....	Bert Waggoner.....	Gays.....	105.80	.1233
Illinois.....	John S. Lane.....	Lacon.....	100.40	.2689
Illinois.....	Ralph Wooters.....	Moweaqua.....	96.97	.2288
Illinois.....	Wilson Francis.....	McNabb	94.50	
Illinois.....	Wilbur Corbin.....	Wheeler	82.00	
Illinois.....	James P. Brown	Raymond.....	59.00	

The results for 1912 from the twelve southern states whose club work is under the direction of the Office of Farmers' Cooperative Demonstration Work is even better than the showing for the northern and western states:

STATE	NAME	ADDRESS	Yield Bushels	Cost Per Bushel
South Carolina	Ernest Joye.....	Venters.....	207.18	\$.400
Mississippi....	Carlous Reddock.....	Summerland.....	206.60	.136
Alabama.....	Willie Atchison.....	McCalla	198.25	.165
Alabama	J. P. Deach.....	Union Grove.....	160.27	.103
Georgia.....	Byron Bolton.....	Zeigler.....	177.	.135
North Carolina	George E. West	Kinston.....	184.	.190
Virginia.....	Frank Brockman.....	Amherst.....	107.	.225
Tennessee.....	Herbert McKibbon.....	Culleoka.....	159.	
Georgia.....	Walter Bridges.....	Dawson.....	156.	.3125
Arkansas.....	Lester Carrard.....	Magnolia.....	134.20	
Louisiana.....	John M. Cobb.....	Vowells Mill.....	131.50	.150
Florida.....	Richard Miller.....	Baker.....	129.29	.260
Texas.....	Earle Davis	Grapeland.....	122.50	.094
Arkansas.....	Robert Connally.....	Mena.....	117.67	
Oklahoma.....	Elston Coleman.....	Newkirk	101.08	
North Carolina	Herbert Allen.....	Pungo	83.	.142

If all the farm boys now in rural schools could be interested in club and home project work, thus getting the information and developing the standards of farming required of members of the present clubs, the resultant increase in agricultural wealth in the nation would be almost beyond computation. The productivity of the soil would be far more than doubled and its natural strength would be much better conserved than under present conditions. And corresponding results are possible in the breeding and raising of stock, in the care and use of improved farm machinery, in the planning and erection of farm buildings, including farmhouses, and in all that goes to make farming a profitable and worthy career.

Let the rural school show its value by making an immediate and practical contribution to the welfare and success of its community, and there will be no lack of financial or moral

Reflex influence upon schools



Lester Bryant, champion boy corn grower of Kentucky (1912). He grew 148 bushels and 55 pounds of corn on his one acre

support on the part of its patrons. Rural schools that have earnestly and effectively taken up vocational training have uniformly found ready cooperation and enthusiastic appreciation. Schoolhouses have been improved or new ones erected, apparatus and other equipment have been supplied, and teachers' salaries have been increased as an evidence of awakened public interest in practical education. One Illinois rural district paid the teacher one hundred and ten dollars a month, nine hundred and ninety dollars a year, in 1913, for teaching a one-room school in which the vocational ideal dominates; and many other districts in widely scattered regions are offering teachers who are capable of successfully introducing vocational subjects fully fifty per cent. more salary than the average for their vicinity.

Nor does the vocational rural school lose its grip on its pupils, as is the case with the old type of school, and **Influence upon pupils** allow them to drift into their life-work without preparation, and deficient in education. One of the most marked results of introducing vocational studies into the school has been larger enrollment and more regular attendance and greatly increased interest. The actual attendance in the modernized school is not infrequently doubled and occasionally trebled as compared with the former school. Not only do boys and girls who ordinarily would drop out of school at the third, fourth or fifth grade continue to the end of the elementary course, but many of them are later found in the high school. Especially is this true where the high school also offers the vocational subjects.

The experience of Superintendent Kate R. Logan, of Cherokee County, Iowa, forcefully demonstrates the

power of a rural school of practical type to attract the young people of the farm. In traveling up and down Response to "special" schools her county, Miss Logan noted many boys and girls from fifteen to twenty years of age who were not in school, and who possessed but a meager education. These were the boys and girls who had dropped out from the district school, lost step educationally with those of their age, and now felt that the school had nothing for them. Miss Logan presented the case of these young people to her township school boards all over the county. As a result, a number of "special" schools were established, two of them in new buildings, to provide for this class of students. These schools open in the early autumn, and run until late spring. They employ the best teachers available. The course of study includes a review of the "three R's," agriculture, manual training, domestic science, music, history, civics, literature, etc. The instruction is as concrete and inspiring as it can be made and is directly connected with the life of the pupils wherever possible.

Needless to say, these "special" schools have been a success. They have been so great a success as almost to embarrass the school officials by the number who sought admission. For boys and girls have come from far and near to the schools, walking where possible, and supplying their own conveyances where the distance was great. The attendance has been regular; the work has been thorough and effective; the spirit of loyalty and enthusiasm in the school has been noteworthy. A number of young men from these "special" schools have now gone to agricultural colleges, and others of both sexes are planning to continue their education in high schools and colleges.

It is not likely that "special" schools, like those set up by Miss Logan will be widely adopted. They ought not **All rural schools to be vocational** to be necessary. The work and opportunities they offer ought to be available in *every* rural school. Then the boys and girls will not drop out of school and require special schools in which to continue their education. The superintendent and people of Cherokee County are to be congratulated on their wisdom and enterprise in providing for the neglected group of their youth who attend these special schools. But the next step is to make all the schools of their county "special" schools. And what is true of this county holds for all rural schools throughout the land; their work must be made so much a part of the life-equipment of the pupils that their appeal will be irresistible and the help they render invaluable—they must in a true and broad sense be made vocational.

Whatever may be the method taken by the individual school, therefore, to work out its problem, we may conclude that our rural schools are about to enter on a system of practical vocational training for the farm boys and girls. No doubt there will be here and there a school, and perhaps here and there a whole county, where industrial education will for a time be looked on as a fad, or as impossible in the smaller type of schools. No doubt vocational instruction will here and there be undertaken by teachers who are unprepared in either knowledge or sympathy for such work, and harm will be done to the movement and its progress delayed. Yet the movement is under way, and its success is but a question of time. The logic of the age demands that the rural schools shall be made vocational, the leadership is organizing to conduct,

a nation-wide campaign for such a result, and the patrons of the schools are everywhere loyal supporters of a vocational program once it is established. It is inevitable that our rural schools shall come to supply vocational training for the farm.

FOR TEACHERS' DISCUSSION AND STUDY

1. It has been conceded for generations that training must be supplied by the state for those who are to enter professional pursuits. Should not the state likewise provide training for those who are to enter industrial pursuits?

2. Suppose it would cost your state two million dollars a year more than it now pays for its schools to introduce vocational training into its rural schools; also suppose as a result of such studies taught in the schools the yield of corn is increased by five bushels to the acre (which would be easily possible). How would the state come out financially on the investment?

3. A great many rural school-teachers are graduates of town high schools and have never lived on a farm. The majority of them are girls. Can these teachers hope to make efficient instructors in the vocational subjects? If so, how must they prepare?

4. Has your school made any preparation for teaching agriculture? If so, is the equipment of it adequate? If no provision has yet been made would you know just where to begin, and what to do in furthering the project?

5. In some localities the farmers have little faith in the agriculture taught in the schools. Can you suggest methods by which this indifference or antagonism can be overcome?

6. What "home projects" for boys would you find it possible to introduce into your school work? For girls? Do you foresee that an untactful teacher might defeat all

such plans for work by failing to gain the cooperation of parents?

7. Do you think that school gardens could be made a success in connection with your school (1) for teaching nature study and agriculture; (2) for purposes of decoration?

8. What club work would be best adapted to your school conditions? Do you know how to proceed in organizing and conducting a corn club? A canning club? If not, do you know where to write for instructions (ask your superintendent)?



PART III

THE TEACHER AND THE

RURAL SCHOOL



CHAPTER VII

THE SPIRIT OF THE TEACHER

The chief factor in increasing the efficiency of the rural school is, after all, the teacher. For on the teacher all the rest depends. No matter how perfect the curriculum, or how excellent the buildings and equipment, these things all go for naught except as they are employed by devoted, inspiring and efficient teachers. More than this, the teacher is the most potent influence in awakening interest, shaping public sentiment and winning from the patrons of the rural schools the support necessary for the success of the new movement. The key to educational progress is largely in the teachers' hands. It is only as they comprehend the situation and lend their support to the new ideals that results will be possible. If the teachers are able to enter enthusiastically into the spirit of the new movement, if they are willing to prepare themselves fully for leadership in their communities ; and if they are ready to devote their best powers to the school and the community, then there can be no doubt of the successful outcome of the reforms now taking shape in the rural schools.

But if, on the other hand, the teachers should fail to catch the spirit of the new movement, to comprehend its **Power to hinder or promote progress** significance, or to prepare themselves to be its exponents, then the movement could not succeed. For it is the teacher who comes into

immediate contact with the patrons of the schools. County superintendents may be ever so efficient and have their plans ever so well laid, but it must finally be the rural teacher who carries these plans into execution. School boards may be ever so loyal to the educational interests of their districts and desirous of offering the children the best opportunities available, but they need the inspiration and guidance that alone can come from a thoroughly informed and highly enthusiastic leader such as the rural teacher must be under the new order.

The teacher must be the concrete embodiment of the educational ideal. It is for him to reveal the new meaning of education—to show how education

The teacher must embody educational ideal efficiency and success in the life and

work of the farm. It lies with him to attract the rural boys and girls to the school and by his effective teaching hold them there until they complete the course it offers. The teacher must be the source of inspiration and enthusiasm capable of leading the pupils to desire an education because they see its advantages. The rural teacher occupies a strategic position in the greatest educational movement of modern times,—the movement to bring the rural schools up to the degree of efficiency necessary if the life and standards of our rural communities are not to deteriorate. This is a great responsibility and at the same time a magnificent opportunity.

The spirit which the rural teacher brings to his work becomes, therefore, an all-important matter. For the at-

The spirit of the teacher titude with which one confronts one's task is the first measure of his suc-

cess. Battles have often been won against great odds through an invincible spirit of loyalty and de-

votion on the part of the soldiers; and battles have as often been lost because devotion and loyalty were lacking. Half-hearted service always fails of its purpose, for it never calls forth the full powers of him who serves, nor the full response and appreciation of those who receive the service. The indifferent or spiritless teacher would do well to remember Emerson's remark, that "Nothing great was ever achieved without enthusiasm." Nor is anything worthy ever accomplished without sincerity of purpose. A great work greatly performed reflects its greatness on the worker; but it dwarfs him who slighted it or uses it as a plaything. A spirit of cooperation begets its kind, but an attitude of selfishness or indifference is fatal to community of interests or efforts. The teacher must give what he expects to get back. He will find that the world is a great mirror which returns to him the image he brings to it.

How, then, shall the rural teacher look on his work? Is it to him an opportunity or an imposition? Is the school simply a place where so many school-days of so many hours each can be traded for a given number of pay checks? Or is it an opportunity for investing the best powers of his mind and heart in the lives and welfare of those with whom he works? The pay?—Ah, yes, the teacher must have his pay. Would that it were twice what it is! But, having once arranged the matter of the pay, that need not again enter into his reckoning. The true teacher will feel his best powers placed under tribute by the need and the opportunity that confront him, and will not measure the service he renders, nor in any degree check it up in a balance against dollars and cents.

One rural teacher was taught this lesson by a school director to whom he applied for a school. The board had

fixed the salary at the pitiful sum of thirty dollars a month for a term of three months. The teacher remonstrated at the meagerness of the salary, but the director replied that, though he was sorry it was not more, yet this was the amount decided on by the board, and was therefore all he could offer. The teacher finally said, "I will accept the school at thirty dollars a month, but I warn you now that I shall not teach so good a school for thirty dollars as I would for forty dollars a month." The farmer looked at him a moment in astonishment and then administered a well-merited rebuke: "Sir, you are lacking in the true spirit of the teacher; you could not have this school at any price!"

Only as personal hand-to-hand work by sincere teachers is done in the rural communities will the new spirit in education permeate the patronage of the rural schools and finally serve to reconstruct their attitude toward the

Results accomplished by a devoted teacher school. The influence that may be exerted by an enthusiastic and capable rural teacher is illustrated in the case of one girl in a western state who entered a rural community in which the school spirit and standards were low, the building unsuitable and out of repair, and equipment almost wholly lacking. This teacher set resolutely at work to remedy these conditions. She gave herself completely to her work, and became in a true sense one of the community. Within three years she had revolutionized educational affairs in this district, being responsible for the erection of a modern school building with the latest and most sanitary equipment, and with apparatus and supplies wholly adequate for the needs of the district. She had more than doubled the attendance of the

school, had had her own pay largely increased, and had made the school the central feature both intellectually and socially in this community. What was accomplished by this one rural teacher can be accomplished by others if they but possess the right spirit and equipment for their work. Indeed just such work as this is being accomplished by thousands of teachers in our rural schools.

The rural school has long been looked on as the lowest and most unattractive teaching position in our whole **Difficult problems** school system. Here most of us had **to be met** to begin, young, inexperienced and relatively unprepared for our work. The school is usually small in numbers, the pupils are poorly classified, the building is diminutive and uninviting, and the equipment insufficient. The salary is inadequate, the school spirit at a low ebb, and all conditions are less inviting than in the town or city school. The rural school has frequently been viewed by men as a stepping-stone to better positions, and by girls as a convenient opportunity to earn a little money against the expenses of approaching marriage. It has too often been considered as a place of mere drudgery, a position to be endured if it could not be escaped.

Yet the very difficulty and hardness of the adverse conditions constitute a challenge to the heroic element in **Meeting the dare** choice natures. The obstacles act as a **of hard conditions** dare to the spirit of conquest inherent in youth. They call for sacrifice, yet offer the opportunity for the testing of one's powers and for the winning of hard-earned victories. Man at his best is not afraid of hardship, and does not look for an easy task. The spirit of conflict deeply rooted in human nature, and the impulse to try to the utmost all our powers, prompt us to measure

our strength against difficulties that appear all but insuperable. It is this spirit that explains the measure of success that has attended our rural schools even under such discouraging conditions. That the rural school has proved as efficient as it has, is a high testimony to the intelligence and resourcefulness of our young men and women who have begun their careers as rural school-teachers.

Only the teacher who is willing to accept the dare of hard and trying work has any business in the rural school.

Rural school no place for half-hearted work It is no place for the laggard or the weak-hearted, or for one who is not willing to lose himself completely in his work; for to him it will mean but time-serving and inefficiency. One such teacher, entering on a two months' term, said at the close of the first day of school, "Only thirty-nine more days left!" And so he kept on checking the days off until the end of the term released him from his slavery. For no work followed in such a spirit as this can be other than slavery to the worker. Another, a girl just graduated from a high school and a resident of a town, when asked how she liked her country school, said: "Oh, if I can go out to my school each week on Monday morning just in time for school, have a chance to get back to town once or twice during the week, and always escape in time to be at home for supper on Friday night, I think I can stand it."

Necessity of whole-hearted service There is no possibility of high-grade success with such an attitude as this toward one's work; for interest and enthusiasm are lacking, and the choicest powers of both mind and heart lag far below their best. The teacher of the rural school, even though reared in the town or city, must be able to identify himself fully with

the life and interests of the rural community in which he works. He can not come into the country community as a foreigner, and do his best work. He must be fully naturalized to the conditions and the people in his sphere of work. Nor can this be any half-hearted or professional identification of himself with the farming community. He must go the whole distance, and really come to take a deep and permanent interest in the people and their life.

The career of a young man—David Hammond—teaching in a western rural school well illustrates this fine **What enthusiasm can accomplish** spirit of service. David graduated from a town high school where he had an opportunity to study a course in agriculture and learn manual training. He then attended a normal school for a year, studying especially the problems of rural education. He spent the next summer on a farm. The following September, at the age of nineteen, he became teacher of a rural school noted only for its meager attendance and lack of vitality. But here was David Hammond's opportunity. He was not looking for an easy place; he wanted to try what he could do. He became so completely one of the community that they laughingly said they had adopted him. At least they raised his salary, and the second year he was drawing sixty dollars a month. Better still, the school had undergone a marvelous change. The house was now in repair, equipment was plentiful, and a happy throng of children double in number those he found when he began the school were coming regularly. But other districts had heard of David Hammond's success; such fame is sure to spread. David was offered ninety dollars a month in another school, an increase of one-half in his salary. David's old district could not afford to pay more

than sixty. But David stayed. He said that there were still many things he wanted to do for that district before he left. And he is there carrying out his plans. Some may scoff at David's choice. But the world is on the lookout for men who are great enough to make such choices, and some day David Hammond will be wanted to fill a position of large responsibility to which the scoffer could never aspire.

The teacher who has a tendency to feel that his time and powers are in some sense wasted or poorly employed when expended on the backward and plainly clad children of the farms should either change his attitude or his occupation. For these children are not to be slighted or patronized. They are at least the equals of the children of the towns and cities when given an equal chance. And the true teacher will feel that here is the most fruitful ground in which to sow the seeds of helpfulness and influence. If the teacher is worthy to stand at the head of a school, this school, though small and poorly housed, will command the last measure of his energy and effort. It will call forth the finest of his powers, and receive his richest sympathy and helpfulness.

This is to say that the teacher, and particularly the rural teacher of the present day, should be equipped with a passion for helpfulness—an unquenchable impulse to service. Dominant in his life should be the spirit of sympathy which actuated the teacher in the following incident: Annola Wright was a teacher of music. She has since become a noted singer in a great city. While she was still a teacher in the school of a Michigan town she had developed a beautiful voice, and people loved to hear her sing. But

they admired Miss Wright fully as much for herself as for her voice. For she was buoyantly happy in her work, and radiated cheer and helpfulness to all about her. Miss Wright's fame as a singer grew, and she was asked many times to sing at social gatherings and entertainments. These invitations became so frequent and her work as a teacher was so heavy that she was obliged to decline many requests to sing. But there was one place where she never failed to go and sing each week. This was the home of a boy who had been a pupil in the school, but was now crippled and helpless. His mother was a widow and washed to support her home. The boy could no longer go to school to hear Miss Wright sing, so she came and sang her most beautiful songs to him. One day the crippled boy sickened of a contagious disease, and the house was quarantined. Miss Wright came and stood outside the fence and sang to the sick boy as he smiled out of the window. She came each day until he died. Because of the contagious disease there could be no funeral service. But on the day when they were to carry the body of the boy from the house, Miss Wright came again and standing by the gate, sang for his funeral the old songs the boy had loved.

Soon after this Miss Wright resigned her position as teacher of music and went to the city to study. Success
The reward of helpfulness came to her, and her old friends in the Michigan town desired to hear her sing again. They were proud of her success. They sent her an invitation to give a concert in the town. Seats were sold at city prices and the concert hall was crowded. When Miss Wright came before the audience to sing, the people wondered at a little pause before she began, and a strange note of emotion in her voice in the first

song. They did not know that this was caused by seeing the mother of the crippled boy, who earned her living by washing, occupying one of the seats, that she might show her appreciation of Annola Wright's kindness to her boy.

The teacher, especially the one who comes from the city high school, must not assume that because the patrons of his school are dressed in working clothes they are therefore of a different order of beings from himself. He must not allow himself to think that because they work with their hands and have to do with the soil, their vocation is of a lower order than that of the city worker in store or office or shop. He must be able to sense the rugged and virile manhood and the strong womanhood to be found among the rural people and respond to it with the best that is within himself.

Not to be able to approach the problems and opportunities of the rural school in this spirit, far from proclaiming any native superiority inherent in the disdainful teacher, only proves his own narrowness and provincialism. What he needs first of all is to broaden his own outlook on life, and to increase the range of his own knowledge and sympathies. He needs to look beyond the small circle of his few acquaintances or intimates, and become able to meet those in different walks of life, recognizing their true worth and acknowledging their contribution to the common welfare. He needs to cultivate in himself an appreciation of interests and values hitherto unknown to him.

The true teacher will, then, enter fully and completely into his work in the rural school, and will withhold nothing of interest, enthusiasm or effort in his desire to be helpful to his community. If he is from the town or city,

he will earnestly seek to inform himself on the problems and activities of the rural community. He will, in sympathy and appreciation, at least, become a farmer, and will become able to think and feel as farmers do. He will understand the children of the farm, and will bring to them many things that will brighten and enrich their lives, while at the same time he leads their ambitions and inclinations to choose the farm as an occupation. Such a teacher will never hold himself aloof from or above his pupils and patrons, but will expand his own personality until it is large enough to include them all, with their interests and problems. And he will find this fully as much to his own advantage and growth as to theirs.

The teacher of the rural school sometimes feels that because the school is small, and the pupils young and backward in their studies, the work is therefore less worthy than in higher grades and larger schools. It is a tendency common to human nature to long for other environment and conditions than those in which we work, and to think that if we could only occupy the position that some one else has, we should be much happier and more successful. Work becomes humdrum, and the surroundings commonplace, and we long for a change. While this attitude is natural enough, it is well to remember that all labor becomes routine, and must do so before we can become proficient in it. It is only the teacher who can invest the common duties of the school-day with interest and newness who can escape the deadness of routine. While the lessons may be familiar and the subject-matter old, the children are always new, the human element in our work is always changing. Each child is different from any other, and every one worthy the genius

A cure for impatience with the humdrum

and devotion of a Pestalozzi in his teacher. We all need to learn the lesson that Sill teaches in his lines:

“Forenoon, and afternoon, and night ;—Forenoon,
And afternoon, and night ; Forenoon, and—what ?
The empty song repeats itself. No more ?
Yea, that is life ; make this forenoon sublime,
This afternoon a psalm, and this night a prayer,
And time is conquered, and thy crown is won.”

Still further is it to be remembered that the elementary work of the grades is not the least important work of the **Elementary grades** school. It is often thought that the **the most important** high-school teacher is engaged in more dignified and significant teaching because it is more advanced. Such a view overlooks the fact that the most important years of the child's education are the earliest years. Before the child goes to school at all he has been learning faster than he ever learns afterward. The first years of his schooling are more important by far than the later years. If a child is compelled to have a poor teacher anywhere in the course of his schooling, far better that this should be in the higher grades or in the high school than in the first years. This is true not only because the first years set the standard and give the bent for the later years, but also because the teacher plays relatively a larger part in the learning of the child when he first goes to school than after he has fully learned to use books as a tool in his education.

It is high time that all teachers, superintendents and school boards come to realize that the grades of the **Best ability required for children** elementary school require quite as good ability and as complete training as the

high school, and that the pay should be fully as great. The failure to recognize this truth has come from the mistaken notion that the difficult and important thing about teaching is the subject-matter to be taught. Because the subject-matter of the lower grades is simple, it has been assumed that the teaching must be as easy. But the subject-matter is the easy part in any grade of teaching. Any one can learn his arithmetic, geometry or history. The really difficult factor in teaching is the *child*; and the younger child, who has not yet learned the art of mastering books, and who still lacks the foundations on which to build in his study, is the hardest problem for the teacher to master.

The rural teacher has need at the present time to be the most devoted and progressive of any class of American teachers. This is true from the fact that the needs of the rural schools are just now the most pressing and the opportunities the greatest of those in any class of schools. The rural school has been left stranded behind all others in recent educational progress. But the advance is beginning, and reconstruction is rapidly taking place. In this advance, the rural teacher must be able to take an important part,—must be able, under the direction of county superintendents and other administrative officers, to assume leadership in carrying out lines of policy for the improvement of the rural schools.

Only devoted and progressive teachers can measure up to the responsibilities now presenting themselves. Only the teacher who has fully entered into the spirit of progress beginning to actuate our agricultural industries and the rural schools can be of any great service in the newer type of rural school. Indeed the unprogressive teacher,

the teacher who is not able or willing to advance, or the teacher who has fallen into the rut of mechanical teaching, would be of far more use in a school of the old type than in the more efficient rural school of the present and the future. The rural teacher must therefore be willing to *grow*; must be willing to come into the full spirit of progress and to master the knowledge required to lead in the new curriculum and new methods of to-day. He must be willing and able to cooperate with superintendents and other educators in formulating and carrying out a progressive program for the reorganization of rural education.

The rural teacher must take teaching seriously. This does not mean that he must be long-faced and solemn, **The teacher's view of his vocation** weighted down by a sense of responsibility. The teacher should of all persons be possessed of a ready sense of humor, and be able to see the lighter side of things. But he should also be able to take serious things seriously, and know that it means something to be commissioned by society as the leader and director of children. He must comprehend the wide-spread social movement toward efficiency as the outcome of all true education. He must recognize that failure on his part can but result in depriving childhood of its right to full preparation for the duties and opportunities that lie ahead. No thinking person will therefore enter on such responsibility lightly, or pursue the occupation of teaching frivolously. He will never feel, as one thoughtless teacher expressed his own attitude, that "it is a great joke to be teaching the kids." He will give himself unstintedly to his work, withholding nothing of time, personality or effort in the service of his school. He who can not do this has no moral right to take upon

himself the obligations of the teacher,—*especially the rural teacher.*

FOR TEACHERS' DISCUSSION AND STUDY

1. Have you observed cases where one teacher failed and another succeeded in a school owing to a difference in the spirit brought to the work? Is there any cure for the indifferent teacher, and if so, what?
2. Is a teacher justified in withholding something of his best effort if he feels that the salary is insufficient to compensate for the work demanded? Explain the paradox, "He who does not earn more than he receives, receives more than he earns."
3. A pessimistic writer recently said, "Any person, no matter how much he professes to love his work, will leave this work if you offer him twenty per cent. higher salary somewhere else." Do you believe this? Is it not a person's duty to command the highest salary his powers will justify?
4. Account for the fact that educational service is paid less than service in commercial lines. For example, the president of one of our largest universities receives ten thousand dollars a year; the president of an insurance company receives twenty-five thousand dollars a year.
5. Do you believe that Miss Wright, whose story is told in the chapter, received personal rewards in satisfaction and development equivalent to the sacrifice required? Is there any danger of being miserly with one's powers as well as with one's money?
6. Have you known persons whose qualities of character seemed to be brought out through service? Is it necessary that the service be in some conspicuous position in order to produce such a result?
7. Have you known teachers who seemed to feel above the work they were doing? Were they successful teachers?
8. Which is the better position so far as investment of

one's influence is concerned, the elementary school or the high school? What is meant by the paradox that the best teacher is the one who renders himself unnecessary to his pupils?

CHAPTER VIII

SCHOLASTIC PREPARATION

We have seen how the spirit brought by the teacher to his work is the first proof of his fitness. But this spirit is a matter of growth and development. Attitude arises not by chance, but out of environment and training. The teacher can not create a certain spirit toward his work by mere compulsion of will or by determination. However good his intentions, he can not teach that which he does not himself know. He can not enter fully and sympathetically into the life and interests of those whose experiences are wholly different from his. He must have some point of contact with the people he serves, some common basis of thought, feeling and knowledge. The rural teacher must therefore be educated, so that he can lead and inspire; he must be trained, so that he can teach; he must be at heart one of his people, so that he can enter into their lives as a friend and leader. His spirit and attitude must be shaped to this end by his preparation and training.

For it is only as the teacher has made concrete in his own life and experience the standpoints and methods he wishes to impress on others that he will find his instruction effective. The world is never either formed or reformed by abstract truth or general theory. It requires the stimulus of actual lives; for it is, after all, the lives of

The teacher must embody the truth he teaches

leaders that we follow, and not their words. This truth has not always been recognized in teaching. Not infrequently teachers have been employed who had not mastered for themselves what they were attempting to teach. And we have therefore had the spectacle of a teacher trying to transplant arithmetic, grammar or geography directly from the pages of the text-book into the minds of the pupils. It is needless to say this process is always a failure. The subject-matter taught must have first become an integral part of the knowledge of the teacher. One can not teach what does not come from within; one can not pick matter up and hand it on to others without first partaking of it one's self. Knowledge, standpoints, ideals, and all other values must first be so thoroughly assimilated that they are a real part of us before we can impart them to others.

The rural teacher must be well educated. For if the blind undertake to lead the blind shall not both fall into the ditch? The public demand does not, in all parts of the country, yet insist on adequate scholastic training for teachers. Even in some very rich and highly intelligent states, hardly the simplest rudiments of knowledge in the fundamental branches are required of rural teachers. Thousands of schools are yet taught by those who have had little or no schooling in advance of that given in the rural schools themselves. In a middle western state one girl who failed in the examinations for passing from the eighth grade into the high school of her home town, took the teachers' examination, obtained a certificate and became a teacher in the rural schools! In many parts of the South the conditions are as bad. Such a situation is a shame and a disgrace. Where standards of such low

**The blind attempt-
ing to lead the
blind**

grade are tolerated by the public, the teachers themselves ought out of self-respect to arise and demand adequate scholastic preparation as a condition of entrance to their professional ranks. Teachers must be willing to do this if they expect to stand high in public regard; if they hope to increase their salaries; if they wish to be laborers worthy of their hire. All efforts, therefore, such as are sometimes made by teachers to lower the scholastic requirements for certificates, or to avoid the necessity for professional growth and development as a condition to promotions or advancement in the grade of certificates, are not only hostile to public welfare, but inimical to the best interests of the teachers themselves.

These are days of high prices—high cost of living, high priced land, and highly paid labor. The most expensive commodity of the present age, however, is ignorance. Nor can the farmer, any more than those in any other vocation, afford to tolerate it. The rural teacher and the rural school are coming more and more to be two of the most valuable assets in any rural community. But the rural teacher must be able to fulfil his part of the contract; he must be prepared for the greater educational demands recently being placed on him.

Indeed, teachers are in these days being selected for the rural schools on a new and different basis from that which has too often prevailed. The time is now past for choosing a teacher because of his physical stature, or because he has a reputation for “cleaning out” some neighboring school. He is no longer favored because he happens to belong to a particular political party. And even the fact of his being a relative of an influential member of the school

board is coming to lose its coercive power. The newer and more hopeful type of question is, What is your education? What has been your type of training? What do you know about agriculture and life on the farm? What have you already accomplished? What can you do for this school and community? *Are you really prepared to teach school, and do you know how*, or are you only seeking a convenient place to earn a little money?

Laws have been enacted in a number of states requiring a full high-school education and a certain amount of normal training before a teacher's certificate can be granted. This is well; and the movement will spread as fast as the false economy of employing unprepared teachers is fully realized. But this is, after all, only an initial step. We must go farther, and also insist that the education received shall be of the type to fit for the special problems of the rural school. The rural teacher should have had practical training on the farm itself, and should, if possible, have had at least a part of his education in the rural school. For only in this way can he have a concrete and first-hand knowledge of the problems to be solved through his teaching. This is to say that the scholastic training of the rural teacher must include a knowledge of farm life and its problems as well as of books. A scholastic training in a city school, with no opportunity for acquaintance with rural people and conditions, is far from an adequate preparation for teaching a rural school. Not until we have well-equipped and highly efficient rural high schools, as well as elementary schools, shall we be able to offer the best type of fitting for the rural teacher.

It is true that we have, especially among our older rural teachers, many who have not had the advantage of a high-

school education, and yet are doing excellent work. Some of these began when high schools were not so common as Old standards they are now, and when the certificate requirements were less exacting than at present. Yet these teachers with limited training, who have so often felt the need of better preparation, will be the first to advise every young teacher to acquire a thorough education before entering on his work. And not a few of the more mature and successful teachers have found it worth while to drop out of teaching for a time in order to go to school and make up for the earlier lack of opportunity.

Many teachers could learn a valuable lesson from the experience of John Ricketts, one of the best rural-school teachers of his state. In the spring of 1908, when at the end of the term John Ricketts closed his schoolhouse for the vacation, he had completed his thirty-third year of teaching in rural schools. He had had only the scanty training of an old-time district school supplemented by his own experience and study. He was of the growing progressive type, and ranked as a successful teacher. But John Ricketts had caught the spirit of the times and felt that he owed his school and community greater efficiency than he possessed. The following September found him enrolled in one of the best normal schools of his state, broadening his grasp of the subjects he had been teaching so many years, and studying the new industrial subjects and practical agriculture. He even took a course in sewing. After a year of study he returned to the school he had left. He was received with open arms and an increase of salary. He introduced agriculture, manual training, drawing and sewing into his school. He taught the old subjects with

a new enthusiasm and efficiency. The following summer found him again in the normal school, spending his entire vacation in study. Again he returned to his rural school, this time with his efficiency and usefulness so increased that his services were in demand throughout the entire township. So John Ricketts went on. Each summer he spent in study and each year he taught better for this growth and knowledge. To-day he is receiving in salary almost double what he was receiving five years ago when he decided to strengthen his scholarship and broaden his knowledge. Half a dozen different school corporations are seeking to engage him for their schools. Both his responsibilities and his salary have been increased, and he is now supervisor of music, drawing and industrial work for all the schools of his township.

John Ricketts' own view of the matter is as follows: "I taught for over thirty years before I was prepared to teach. I did not grow as a teacher and advance in position because I started on too narrow a basis of education and reached my limit soon after I had begun. I taught all I knew, and did the best I could, but I was unable to do really effective teaching, for I did not have the preparation. It is my intention to spend my summers at some good school where I can replenish my fund of knowledge and keep increasing my efficiency."

The example set by John Ricketts thirty years after he began to teach should be followed by many teachers who are yet young in the work. It should be followed by still others who are just beginning. And this can be accomplished in many instances without the expense of leaving home to attend a distant school. Good high schools are available in every

county. Many of them are recently coming to offer normal-training courses especially for rural teachers. Almost every county also has its summer training school for teachers. There is no longer any excuse on the part of the teacher for lack of education except want of ambition, or unwillingness to spend the time and money in preparation. And either of these causes proclaims the candidate unworthy of the high office of teacher.

No person should take on himself the responsibilities of a teacher in the rural schools without the equal of at least a good high-school education. He owes this both to himself and to the schools. For one can not teach all one knows. One must have some background of knowledge and experience beyond that daily drawn on. Otherwise one's teaching will lack aim, balance and precision. It will be wanting in power and effectiveness, for these come from the reserve force of the teacher. It will fail to arouse and inspire, for inspiration and enthusiasm have their roots in the deeper levels of the mind, and not in the mere surface currents. Nor can one himself fully profit from experience, and grow under the stimulus of responsibility except as he has a reasonable foundation to build on. Thousands of teachers are finding themselves hindered, baffled and discouraged by problems and responsibilities which they could easily meet had they adequate preparation for their duties. Difficulties that ought to serve as stepping-stones to greater efficiency become stumbling-blocks in the way of progress and advancement. Powers and capacities that should develop with the experience of the school-room fail to advance because of not having had sufficient opportunities for growth. Such teachers, having in them

A high-school education the minimum

the possibilities of great service, are rendering mediocre or poor service; possessing the capacity for great personal success and achievement, they accomplish small results. And all this because of lack of sufficient education and training for their work.

Nor should the requirement of adequate scholastic preparation be looked on by teachers as a hardship. It is a false system of pedagogical book-keeping that leads some teachers to place on the debit side of their accounts all the time, effort and money expended in preparing for their work, and on the credit side only the salary they receive in return. For all that is required of a teacher in the way of scholastic preparation for his work is valuable and necessary just as education. No intelligent, ambitious American youth should be satisfied to enter on his career in any vocation to-day with less than a good high-school education. We are asking no more education of our teachers, therefore, than twentieth-century conditions demand of all who covet success and happiness. And every earnest teacher will be willing and glad to meet these new demands, even at the cost of personal effort and sacrifice.

FOR TEACHERS' DISCUSSION AND STUDY

1. Regardless of requirements in your own state, what do you think is the least amount of schooling that should admit one to teaching? Do you approve of the requirement in certain states that does not admit candidates to first examination for a teacher's certificate without graduation from a four-year high school?

2. In some states the teachers' examination papers are all graded by the state department of education instead of by the county superintendent. What advantage has such a plan?

3. Do you think that, in general, it pays teachers to attend summer schools? Is there danger of one actually losing ground while teaching if he does no special study?

4. In some states even low-grade certificates are renewable for life when once obtained. Do you believe this plan is best for the schools?

5. Does the statement, "Knowledge is power," hold in teaching? Amplify your answer to explain just what you mean.

6. When one is meeting the requirements for teaching is one not adding to one's own education, so that there is no real hardship involved? Do we in general ask more education of our rural teachers than all American citizens should have?

7. Suppose that you are teaching, but have never studied agriculture, and that this subject is now to be added in your school. What course should you pursue? Is there danger of defeating the whole purpose of the new education by allowing unprepared teachers to attempt to teach what they do not know?

8. Suppose a girl expects to teach but two or three years, and then to marry. What should be her attitude toward scholastic preparation?

CHAPTER IX

PROFESSIONAL TRAINING

Knowledge of subject-matter, while the first requisite in the training of the teacher, is not all. It is one thing to possess certain knowledge, and quite another thing to be able to teach it to others. The older supposition was that scholastic training is all that is necessary in order to become a successful teacher. But we have discovered that this is not true. The great specialist is often the poorest teacher. President Butler says that the worst of all teaching is being done in the colleges and universities. The professors are noted scholars, but many of them are not teachers. They are masters of their subjects, but they do not know how to present these subjects to students.

But the possession of knowledge coupled with inability to teach it is not confined to college specialists. The most

Example of lack of professional training dismal failure in a certain county in a western state noted for its high scholastic requirements was a rural teacher who held a degree from the justly celebrated university of her state. She began teaching when normal training was not considered essential; she did not know children, nor how to teach them. She seemed to assume that children learn just as she herself learned, and made no effort to meet them on their own level. Finding the elementary branches of the rural school easy for her own

mind to grasp, she failed to understand the difficulties they presented to the minds of her pupils. This woman has now taught for fifteen years, but no two of these years in the same school. She is recognized as a mediocre teacher in some schools, as a failure in others. In no school is she called a success. She has failed and, it is to be feared, always will fail, because she lacks knowledge of children, of method, of school organization and management. The chances are that if this well-educated teacher had at the right time been given proper instruction and help in the practical problems of the schoolroom, she would have developed into an excellent teacher. But she quickly found her poor methods crystallizing into bad schoolroom habits; she early fell into a rut of inefficiency, and has now been too long in that rut to seek a better way. She has lost confidence in herself, and no longer expects success, even with her splendid academic equipment.

This is no argument against thorough scholastic training. Far from it. It rather shows the necessity for **Teaching an art** adding to one's knowledge of subject-matter the further knowledge of how to teach it. For teaching is an art. It rests on certain scientific principles, and has to be learned, the same as any other art. We say that some persons are "born" teachers; but this only means that they more clearly and easily seize the fundamental principles underlying instruction, and more skilfully put them into practise. But even "born" teachers need to be trained in the principles of their art. For such training will save them from many mistakes; and a teacher's mistakes are always made at the expense of some child's growth and development. His acquisition of skill as a teacher has cost his pupils dear. We do not place tools in the hands of an untrained work-

man and set him at work on expensive rosewood and mahogany. We first train him in the use of his tools, so that he will not waste costly material. Yet the rosewood and mahogany are, after all, but wood. If a piece is spoiled it does not so much matter; a few dollars will replace it. But the teacher works, not on material that can be replaced if injured or destroyed, but on lives whose success and happiness depend on the teacher's skill. A mistake made in the education of a child can never be wholly compensated for. "Art is long and time is fleeting." Education-time is all too short at best, and time lost through poor methods or lack of skill on the part of the teacher is irretrievably gone. There can be no making up for the past; the present is too full of its own demands and opportunities. It is more than probable that if teachers were able to put into practise in their instruction the best pedagogical principles now available to them, at least *double the educational progress could be made by our children.* Think of the time and opportunity that would then be saved! Think of the greater efficiency that would result from our schools, and the greater achievement that would be wrought by our people!

The necessity for training in the art of teaching is now coming to be recognized everywhere. None doubt this **Growth of normal training** necessity except the ignorant. Hence we find normal schools springing up in every state, while in some states there are more than a score such schools.

A more recent movement has been the development of normal-training courses for rural teachers in the high schools. Arkansas, Maine, New York, Michigan, North Carolina, Vermont, Minnesota, Kansas, Nebraska, Iowa, Virginia and Wisconsin are in the process of developing

systems of normal-training high schools, where the prospective rural teacher can acquire scholastic and professional training at the same time. There is little doubt that the movement will soon spread to other states. Thus the opportunities are multiplying for professional as well as scholastic training, and thousands of teachers will soon hardly need to leave their own homes, and certainly not their own counties, in order to obtain normal preparation for their teaching.

These schools are not all of equal worth to the teacher. There is a great difference in the value of the training offered in normal schools. In fact some so-called normal schools are little more than schools for additional scholastic training. They seek chiefly to teach the prospective teacher a little more history, to lead him to study a few more literary classics, to enable him to solve more difficult problems in algebra or arithmetic. They ask him to familiarize himself with additional scientific classifications, and to learn still deeper and more technical truths concerning analytical psychology. These things are all abundantly worth while as a part of the academic education of the teacher. But it is not the chief function of the normal school to teach them. The normal school will need, of course, to teach a certain amount of scholastic material. For method and principles can not be separated from the matter to which they apply. The great work of the normal school, however, is *to teach how to teach*. And all matter taught to prospective teachers in normal schools should be taught them primarily as *teachers* instead of as learners. If the teacher is ready to take up the work of the normal school, it is not more grammar that he needs to study, but how to teach the grammar he knows. It

is not more skill in arithmetic that he requires, but more skill in teaching arithmetic to children. And so on with all the remainder of the subjects. The practical concrete problems of the class and the schoolroom should constitute the center of attention and effort in normal training.

To this end the normal school must be able to demonstrate in actual operation among children in school the Need for "observa- theories and methods presented. This tion work" is to say that normal-training schools, whether public normal schools or normal high schools, must afford an opportunity for prospective teachers to watch the instruction of children, or to take part in it themselves under the direction of a training teacher. How different might have been the result if the university graduate mentioned had taught her first school fresh from the influence of a helpful critic teacher! It is safe to say that she would not have been a failure, but possibly even a marked success. She could have observed how a skilful teacher manages and teaches children. She would have discovered the necessity of meeting children on their own mental plane, and not expecting them to be grown-up in their grasp and understanding. She would have learned that scolding and bickering and faultfinding are not the best way of controlling a school, and that lecturing is a poor method of instruction. And having been thus started right in her career, her chance of becoming a successful teacher would have been greatly increased.

Rural teachers of the present day need especially to be taught how to present the newer and more practical sub-
Training to teach jects, such as agriculture, manual
newer subjects training and domestic science. Nor-

mal training should therefore include a strong laboratory course in these branches, with especial emphasis on how to correlate them with other school subjects and teach them to children. It is not enough that the rural teacher may have had much practical experience on the farm, or with tools. One may know a great deal about agriculture, and yet be ignorant of the art of teaching it to children. Many a good farmer makes a very poor instructor to his boys. John Ricketts knew much about farming, carpentry, sewing and cooking before he attended the normal school ; but he did not know just what of these things to teach or how best to present them to children. A high school which has recently introduced manual training thought to make the work very practical by employing as instructor a skilled mechanic of the town. But he proved a lamentable failure. The man had handled tools all his life, but he could not teach others to use them. So great is the difference between knowing a thing, and knowing how to cause others to learn it.

The fate of the new branches now being introduced into the rural schools will depend in large degree on the skill and effectiveness with which they are taught. If the teacher presents agriculture in an impractical way, revealing his own lack of knowledge of the subject or his inability to teach it, both the pupils and their parents will doubt the value of its study. If manual training is looked upon chiefly as play, and useful only in making bric-à-brac and fragile ornaments, the school board may well hesitate to invest money in tools and equipment. If domestic science is conceived only as an opportunity to do some interesting putting around while cooking fudge or preparing fancy desserts, it will be sure to fail in awakening enthusiasm among the practical housewives

of the school community. Each of these great lines of study must be understood in its fundamental and deeply practical bearings. The teacher needs to comprehend their relation to the most vital interests and welfare of his people. And he must know how to teach them that they may accomplish the ends sought through placing them in the rural school,—the better fitting of the boys and girls into the practical life and duties of farm and home.

The rural teacher who to-day possesses a good education and a practical normal training has a great advantage

Advantages to the professionally trained teacher over the untrained teacher. Many of these better-prepared teachers are begin-

ning their first schools with more helpful knowledge of school work than older teachers had after teaching several years in a hit-and-miss fashion with no one to show them how. School officials who visit the schools now taught by these inexperienced but well-trained teachers can hardly believe that such excellent work can come from one who has taught so little. Their success is the result of education and training, the proof that it pays to take time for preparation. These teachers are receiving immediate and substantial rewards for their more efficient service. They are chosen for promotion, the better positions are open to them, and they are the first to receive increased salaries. Above all they have the satisfaction of knowing that they are doing their work well, and thus contributing to the efficiency and welfare of their pupils.

The professional training of the teacher includes a knowledge of child life. This, like other phases of training, is partly a matter of books, but it is also a matter of intelligent and sympathetic observation. Here, too,

the spirit of the teacher is an all-important factor. Children are often not understood simply because the teacher

Professional training includes the child has not taken the trouble to understand them. He has forgotten his own childhood, and does not remember that when he was a child he spoke as a child, he understood as a child, he thought as a child. And now that he has become a man, he has put away childish things so completely that he no longer knows childhood or enters into its spirit.

One teacher describes an incident that illustrates the lack of a sympathetic understanding of children. She, as principal of her building, stepped into a schoolroom where some forty bright-eyed boys and girls of nine and ten were sitting. Outside the haze was gathering, and the dull gray clouds hung low. Suddenly it began to snow, first slowly, and then in great flurries. It was the first snow of winter. The children turned to look out of the window, happiness on every face. One small boy in his enthusiasm forgot where he was, and said in a loud whisper, "Look, it's snowing!" The teacher had been annoyed by the wandering eyes. "We all know it's snowing," she said in a cold level voice; "we have seen it snow before. We are drawing maps now." So the children went back to their maps with a sigh, and the gap widened a little between them and their teacher. "Ah me!" concludes our principal; "She has forgotten the first snow when one is ten and just before Christmas."¹

Another teacher, by no means heartless, surely failed to comprehend that heartache may be as real and cause as much suffering in the child as in the adult. A certain day had been trying

¹ In *Living Teachers*.

and the children were restless. Small, freckle-faced Mary had twisted and turned about more than once during the long afternoon. Finally the last straw came, and the teacher said in a voice that cut, "Mary, if I had a face like yours, I would not turn around so often and show it to others." Poor Mary's freckles were buried in a flood of scarlet, her eyes slowly filled until they overflowed, and she at last dropped her disgraced head on her arms and sobbed until her small form shook and her breath came in broken gasps. And all because her teacher failed to keep close to the heart of childhood. Nor is the sequel of this incident without its lesson. For, when the back of the thoughtless teacher was turned, a small red-haired knight across the aisle leaned over and whispered in Mary's ear: "Never mind, Mary; she's none too good looking herself!"—Ah, could we all as teachers but measure up to van Dyke's challenge when he cries out for "a friend whose *heart* has eyes to see"!

One who understands childhood is able to meet his pupils on their own intellectual ground. He does not attempt to teach dry and formal rules instead of subjects instead of living interesting matter. Meaningless definitions are not foisted on the children as knowledge. Tangled and meaningless problems in arithmetic give way to problems dealing with matters of experience and interest. Points at which the child's mind is puzzled are foreseen by the teacher and help is given. Explanations are couched in terms understood by the pupil. In fact, such a teacher teaches the *child* and not the subject.

A teacher who failed to understand the working of a child's mind answered the raised hand of a boy sitting puzzled over a problem in arithmetic. The class had just

begun the study of interest, and Dan knew nothing concerning the borrowing of money, the giving of notes, and pay for the use of the money. For this teacher was of the kind who teach just what they find in the text-book, nothing more and nothing less. Dan said to the teacher, "I don't understand this example, and don't know how to work it." The teacher looked her annoyance as she answered, "O Dan! can't you understand anything? Didn't I tell you that the principal times the rate times the time equals the interest?"—pause. Dan sulkily nods his head. The teacher's face shows relief. She concludes her explanation: "Well, that's all there is to it; the principal times the rate times the time equals the interest. Now you see!" Poor Dan! The blind was leading the blind and both were falling into the ditch—Dan, into the ditch of despondency and dislike for school; the teacher into the ditch of inefficiency and uselessness.

The teacher who is able to enter fully into the lives of his pupils becomes a very potent influence in their development. Most of us can now look back to our own school-days and recall one or more teachers who stand out in our memory as a great source of inspiration and helpfulness. This ideal teacher was a sort of hero or heroine in our eyes, partly idealized in our imagination, it is true, and yet a very real and powerful factor in our growth. Perhaps the greatest secret of this teacher's power over us was his complete understanding of us. He knew where our benighted minds would be puzzled in our studies, he entered into our childish interests and enthusiasms, he remembered that we were dust, and therefore could not be paragons of perfection.

Happy is the teacher who thus understands the secret

springs of ambition in the heart of youth. Professor James tells us that there is a moment in the life of every normal boy which, if seized on when the time is ripe, can be utilized to make out of him poet, philosopher, artist, artisan, or whatever it is his to be. But if this moment is let go by, if the smoldering spark of ambition is not fanned into flame, the occasion is lost and ambition and aspiration may die. An eminent statesman and brilliant lawyer was recently asked what was the secret of his success. He answered: "A school-teacher who understood the hunger in the heart of a boy. One day he found me, a bitter and discontented youth with scanty education and no prospects, following a rude plow across a stony and exhausted field. He sat down beside me on the old wooden plow beam, and found his way into my life. He read me like a book, for he understood me. After he had gone I was astonished at the strange fire of ambition that was burning in my soul. That was all I needed; time and work have accomplished the rest. But I do not like to think what might have been the outcome of my life if that teacher had not understood me, and talked to me there by the plow."

FOR TEACHERS' DISCUSSION AND STUDY

1. Have you observed teachers whose knowledge of subject-matter seemed sufficient, but who failed because of not understanding how to teach it to others?
2. Do you think a teacher is *morally* justified in learning to teach through "experience" gained by experimenting on children, when opportunities are at hand for professional study, practise teaching and observation work in normal schools?
3. We are at present much concerned over securing

but one-half the crop our soil is capable of producing. Apply this same principle to our schools in the light of the estimate that double the progress could be made by the children if they were taught by correct methods. What are your conclusions?

4. We occasionally hear it said that any one who knows a subject well can teach it. Is this true? It is also rather commonly assumed that almost any one can teach young children. Why should young children have the choicest and best prepared teachers?

5. Outline what you think the necessary education, both academic and professional, for one about to take up teaching in the rural schools.

6. Does professional training pay financially? (Make a comparison of the salaries of teachers in your county who have had professional training and those who have not. Also, take into account the better opportunities for promotion.)

7. Have you known teachers to fail because of failure to understand children? Were such teachers usually lacking in sympathy for people in general? Can you recommend a remedy? (Study of psychology and cultivation of interest in others.)

8. Are children more or less sensitive than adults? Are they usually treated with as much consideration as to their real rights as are adults? Does treating a child with consideration mean weakness or lack of control?

CHAPTER X

TEACHER AND COMMUNITY

The teacher, like all other employees of the state, is in some sense a public personage. His duties and relations do not terminate with the school, but extend to every individual and home in the community. The teacher can not say, I am employed by the district only for the time from nine o'clock until four on five days each week; and it is no one's business what I do outside of this time. No public servant can take this position, much less can the teacher. Having employed a teacher, the rural community feels a species of general proprietorship in him and all his affairs. He is freely discussed, and openly blamed or praised. Nothing he does escapes notice and judgment. His conduct, his speech, or his clothing, is equally a subject for comment or criticism.

Nor should the teacher blame the community or feel any resentment over what at first thought may seem an **The teacher owes** unwarranted assumption of the right **full service** to appropriate him completely, once the community has paid for a fraction of his time. For one in a public position such as teaching can not sell a certain portion of his time, or powers, or influence. It is true the teacher may not be compelled to work in the schoolroom seven days a week instead of five, or ten hours a day in place of six. But his interests, his thought

and plans, his sympathy and cooperation, his uprightness and good example are placed wholly under tribute to the community when the contract is entered into. There can be no reservations, no withholding of service or influence, no feeling that the teacher belongs to the community during the school hours but not outside of school hours. For however true this may be in a legal sense, from a higher point of view such an attitude is impossible for the true teacher; it contradicts the very idea of whole-hearted service, and shows the teacher lacking in the spirit necessary to the highest success.

But even the willingness to give himself wholly to his work does not insure the teacher's success. Many teachers fail, not because they withhold their effort, but because they do not know their communities, and hence do not understand their needs, standards and attitudes. They look on the school as a thing in itself, apart from the community, and finally discover that the school is but one part of the larger community life, and can be understood and successfully carried on only in connection with this larger whole.

Knowledge of community essential
One such teacher had recently completed a very successful term in a community which she knew well. She took a new school in a distant part of the same county in a community wholly unknown to her. On the Saturday preceding the opening of the new term she arrived in the neighborhood, not knowing where she was to board. Some one suggested the home of Samuel Dwight. She became a member of the Dwight family, attending church with them on the following day, and being introduced to many of the neighbors as the "new teacher." On Monday the new teacher noticed that she

was received by the school less cordially than was the custom in former schools. By the middle of the week she began to hear whispers of criticism. Before the first week had ended she knew something was wrong. On the next Sunday, the school trustee explained to her the trouble: The community was divided by a bitter factional fight, and Samuel Dwight was leader of an unpopular minority. She had chosen the wrong boarding-place.

This new teacher had blundered innocently, but she had blundered. If she had known her community before engaging her boarding-place or opening the school, she could have avoided the mistake, and saved herself much unhappiness and worry. For, try hard as she might, this excellent teacher found it impossible to regain her standing in that community, and was obliged to leave the school, an acknowledged failure. The school had failed in efficiency to the community, and she failed in rendering her best service in the school.

In striking contrast with this case was that of another teacher who, in the earlier days, was employed to teach the winter term in a rural school in northern Missouri. This young man, a mere stripling, had heard something of the difficulties to be encountered in his school. The former teachers had been turned out each winter for the three preceding years. Our young stripling looked like an easy mark, for he was small and slender, and not skilled in the rougher arts of self-defense. He went over to the district a full week before the school was to open, to see if perchance he could better prepare for the opening day. He went about the neighborhood and became acquainted with the patrons and the pupils. Especially did he look up one particular boy called Bill. He desired to become acquainted with Bill, for two reasons:

Bill was something of a hunter, and the teacher liked to hunt. But Bill was also a leader of the gang that had turned the previous teachers out, and the teacher wanted to win Bill to his side. The teacher and Bill went coon hunting together; they shucked corn into the same wagon. Before the end of the week they had become friends.

Monday morning came, and the young teacher was at the school early. The boys began to assemble on the "Bill" becomes a school ground. The teacher heard friend them talking as he worked by an open window. They were planning how they would begin on the new teacher, and were laying wagers as to how long he would last. Suddenly the teacher heard a new voice enter the conference. It was Bill. "What's up, boys?" said Bill. They told him, expecting Bill to suggest a bolder and more effective plan than they had conceived, and then to take the lead in its execution. But imagine their astonishment when Bill answered: "It's all off, boys. Nobody is going to interfere with the new teacher. I've got acquainted with him and he's the right kind. He's square; he'll be fair. I'm his friend, and anybody that puts up trouble for him has got me to lick—See?" They saw.

This incident was related in introducing the two principal speakers before a great educational convention a number of years ago. These speakers were Bill and his former teacher, still fast friends and now famous educators. They were introduced as "the Honorable William T. Harris, United States Commissioner of Education," and "the Honorable Henry Sabin, State Superintendent of Public Instruction in Iowa." The young stripling of a teacher, by his willingness to make himself one of his

school community, had been instrumental in giving to his country one of the greatest educators of modern times, and had foreshadowed his own highly honorable and useful educational career. Besides this, he had won out in his winter's school.

The teacher who is to take a helpful part in arousing a sentiment for better education and in promoting higher efficiency in rural schools must become an integral part of the community. This influence can not be exerted by an outsider; it must come from one who, in interest and sympathies, is closely united with his people. Nor can this attitude of cooperation on the part of the teacher have anything of the artificial or professional in it. Make-believe will not serve. The interest manifested in the life of the community must be deep-seated and true. The shallow and false is easily detected, and people resent nothing more quickly than being patronized. The teacher who feels, however, that he is wanting in this broader and deeper interest in the welfare of the whole community need not excuse himself on this ground from taking any part in the community life. The remedy for a spirit of indifference is service. We are always deeply interested in those we are seeking to help, and there is no cure like disinterested service for narrowness and provincialism. Even a small self-centered nature can take a small circle of intimates into his thought and sympathy; but it requires a broad generous nature to include the many. And more than one teacher has found his own personality expanding and his interest in humanity growing stronger and more inclusive because he has forgotten himself in unselfish work for his school and its people.

Ability to enter fully into the spirit and activities of the rural community depends in large degree on familiarity with rural life. A large proportion of our rural teachers are girls and boys from the town schools who have never lived on a farm. Not a few of these young people have a feeling of superiority over country people, and a tendency to pity every one who is obliged to live outside a town or city. It is hardly necessary to say that this attitude arises chiefly from ignorance of the possibilities of country life, and from lack of acquaintance with rural people.

No teacher can render the maximum of service in a rural school or be the element of strength he should be in **Interests must include the farm** the community unless his knowledge, his interests and his experience extend beyond the boundary lines of towns or cities or school-room walls. His horizon must reach out into the open fields of rural life. If the teacher would become a true leader of rural children along pathways that lead to the farms instead of to the towns, he must know thoroughly both the pathway and its goal. Necessary as text-book knowledge and normal training are, these are but the foundation. The teacher must know rural life and needs so well that he can relate all the work of the school to their problems and conditions.

David Starr Jordan says, "The knowledge which is of most worth to most people is that which can be most directly wrought into the fabric of **The teacher must know farm children** their lives. And the discipline which is of most value to most people is that which can best serve in the unfolding of their individualities." If this be true the teacher must know the fabric of the daily life of his pupils, and the direction which the

unfolding of their individualities should take. And he can not know these things and remain ignorant of the farm and its possibilities.

Not a few teachers coming from the towns to teach in rural schools are unhappy and below their best in efficiency because they can not accustom themselves to the isolation and certain privations of the country. In place of well-paved and electric-lighted streets, they find dark and muddy roads. They miss the street-cars, the fine shops and stores, the theaters and picture shows. The country appears to them dead and monotonous without the glare and the glamour and the crowds of the city. But rural life is not made up of these things, and the teacher who is not able to work contentedly without them should stay out of the rural schools. Or, better still, he should seek until he finds the compensations in rural life that render the city no longer necessary to his contentment and happiness.

One teacher lost the best of her influence and the greater part of her usefulness in a rural school because she attempted to force on the school the methods to which she had been accustomed in the town high school. As a high-school pupil she had been required to prepare certain lessons and do assigned reading in the evening at home. This looked reasonable enough, so she placed the same requirements on the farm boys and girls during the busy season of the year, not realizing the amount of work expected of these children around the house and the garden and in the barnyard chores. Of course there was criticism, then objection, and finally remonstrance and rebellion. This teacher would have been saved her mistake had she known that most of her pupils were up and at work in the

morning full two hours before her own day began, and that they closed their day and were asleep in the evening at the time she would be settling down to her reading. She was ignorant of rural life and work.

We are inclined in these modern days to smile at the old pioneer custom of "boarding 'round" as a means of **Becoming acquainted with the community** caring for the teacher. Under this plan the teacher was expected to stay a week at a time at the home of each of the patrons of the school. In this way he shared in the collective life of the community and came to know in a very practical way the duties and responsibilities of his pupils and their parents. Of course no one would advocate a return to such a system, yet it had its advantages. And our problem to-day is to gain that intimate knowledge of the actual daily life and thought of our pupils that the old-time teacher was able to get from becoming temporarily a member of their families.

Method of approach It is sometimes objected that rural people do not desire the teacher to visit their homes, or to assume the position of leadership among them. It is said that the teacher is employed to teach the school and that there his functions end. This question will depend almost wholly on the teacher's spirit, tact and judgment. Many farm homes would no doubt find it something of a burden to entertain the teacher, especially during the busy season of the year, as formal "company." It is probable that even a fashionable "call" from the teacher, just when the chores are to be done or the supper prepared, would not be highly welcome. Nor would any community submit to being "led" or "re-formed" in any professional or high-handed way. The teacher whose tact and judgment will not save him from

making such blunders as these would better confine his activities strictly to the school.

But it should not be forgotten that people everywhere, and nowhere more than among those on the farms, respond to true friendliness and the spirit of comradeship. Let the teacher approach the homes of his patrons, not in the spirit of professionalism but in the spirit of true friendship and the desire to get and give on the common level of coworkers for the upbuilding of the school and community; there will then be no lack of cordiality. Let him really become a member of the community in spirit and deed, showing a knowledge of its needs and conditions; there will then be no trouble about his position of leadership. For this will be granted to him by common consent, and will be accompanied by quick responsiveness and ready appreciation.

A teacher in an Iowa rural district put this principle to test in a very concrete way. She had recently begun her school in a new community, and had her boarding-place near the home of three of her pupils, whose mother had the care of a large household. No help was to be had in this home and the mother was often overworked. One evening threshers came, and the mother sighed as she thought of the breakfast to get and the children to prepare for school. Imagine her surprise the next morning when, as she entered the kitchen before it was yet light, to take up the day's work, a knock came at the door, and a young woman decked in a large kitchen apron said, "I am the new teacher. I knew you had threshers and wondered whether you wouldn't let me help start the day's work. I know how to cook." When the teacher left three hours

later to prepare for school, the day's work was well under way, and she had won for herself a secure place in the friendship and regard of that household.

This is a commonplace incident it is true, and would be unimportant were it not for the suggestion and promise

The teacher becomes one of the community it contains. This teacher has now been for several years in the same school, and is a welcome guest and friend in every home in the community. She is invited, even during the summer vacation time, to the various social functions of the neighborhood, and often comes from her own home some distance away to visit among her friends of the school community. Her influence has been felt in every home she has entered, and is to be seen in the greatly increased efficiency of the school. And, incidentally, her own salary has been greatly advanced. What this one teacher has accomplished in winning her way into the hearts and lives of her school people can be done by all other teachers, who are willing to take the trouble, and who know how. Responsiveness and cooperation are ready waiting for every rural teacher who is able to command it by worthy qualities of leadership in himself.

The relations which every teacher sustains to the public extend also to his standards of conduct. And whatever

The teacher's standards of conduct may be the convictions of the teacher on social or moral questions, the judgment of the community is to be taken into account. In some communities, attending dances and card parties is looked on as highly questionable or even wholly immoral. In other places these things are considered unobjectionable, or at least permissible. Some communities expect the teacher to attend the local church and take some part in its activities, while others have no such

custom. It is manifestly impossible to lay down any fixed rule for teachers to follow in such matters. The principle, however, is clear that the teacher should not violate the community's sense of propriety on social or moral questions. This is to say, that the teacher, no matter what his own convictions, should not do things which the people believe and teach their children are wrong. For, as we have already seen, the teacher can not separate his private life from his public influence. And he has no right to offend the convictions of his patrons. Particularly should the teacher set no example which may not safely be followed by his pupils. Where there is the least question of right and wrong involved, the decision should always fall on the safe side. Certainly boys will be deprived of no advantage if they are not led by the teacher's example to play cards and smoke, and girls will suffer no loss of accomplishment if they are not led through imitation of a teacher to attend public dances. None will object if the teacher refrains from doing the things that are questioned, while some may be offended or led astray if he does them.

All this does not mean that the teacher should cater to every whim of the community, and have no convictions of his own. It rather means that he should conform to the community standard where no question of conviction is involved, or where the community standard is higher than his standard. It need hardly be argued that a teacher should never lower his standards or violate his convictions in order to meet standards beneath his own.

The teacher should not offend community standards

The point of view presented in this chapter may be objected to by some who say that teaching is a business proposition, and that the teacher is paid simply for in-

struction in the schoolroom. He can not be expected, it may be argued, to extend his service and influence to the community outside the school. From the legal point of view this claim will be frankly granted. Whether one shall take the legal point of view instead of the one here presented will depend wholly on his philosophy of life.

If the idea of service and the investment of influence does not appeal to one, he will be unconvinced, and believe

The legal versus
the social point
of view

that the teacher owes the community only the work of the schoolroom.

If he does not believe that every great work well done reflects its greatness on the worker, he will differ from our conclusions. If his social code is that one should do only what one is paid for doing, then he will combat our position. But if one believes that no worker can afford to put less than his best powers into his work; if he looks on the chance for helpful service as one of the opportunities of life; if he is convinced that the richest rewards and fullest development come from the most complete giving of self to its task, then he can not be satisfied with the mere legal view of the teacher's relations to the school.

Which is the better philosophy of life? On which would the teacher better plan his career?

FOR TEACHERS' DISCUSSION AND STUDY

1. How far and in what sense does the teacher belong to the community outside of school hours?
2. Should a teacher ordinarily participate in neighborhood social affairs that take his time and keep him up late during the school week? A teacher once remarked that she thought one ought not to be required to teach

next day after attending a dance. What do you think about it?

3. Is there any danger from a teacher going into a community as a "reformer," instead of as a friend and helper? (Do not most people resent being "reformed" and "elevated"?)

4. Have you ever known teachers to lose their influence by being drawn into a neighborhood feud? How can such difficulty be avoided?

5. Do you believe that teachers should visit the homes of the pupils when not especially invited? What caution need be observed in such a procedure? If "home project" work is being carried out, does this open the way for the teacher?

6. Is the teacher under any obligations to use time prior to the opening of the term in familiarizing himself with conditions in the community? Do you think, that in general, the chapter makes of the teacher too much of a missionary? If so, make a statement of your own thought of what should constitute the teacher's relation to the community.

7. How far is the teacher to assume responsibility for the standards and social conduct of his pupils outside the school?

8. Will you attempt to formulate what you think should be a teacher's "philosophy of life," as mentioned near the close of the chapter?

CHAPTER XI

ORGANIZATION

The rural teacher has three great problems confronting him, while the town or city teacher has but two. For every school, no matter whether large or small, whether in city or country, requires that three things shall be done for it: it must (1) be *organized*, (2) *managed*, and (3) *taught*. The rural teacher has all three of these problems to meet; the town teacher has but the last two. For in the town school the superintendent and principal assume full responsibility for the organization of the school. The teacher has but to see to the management and teaching of his room.

And, indeed, the city teacher is not fully responsible even for the management and teaching of his school. For

The rural teacher meets difficulties alone the superintendent and principal are always at hand to offer suggestions and advice, and to them the more difficult problems can be referred. The rural teacher has only himself to depend on. For the help that can be rendered by the board is negligible, and the county superintendent is too far away and his visits are too rare to be of immediate assistance when needed. In the consolidated rural school the difficulties of organization are, of course, greatly reduced. But the daily prob-

lems of the district school must all be met by the rural teacher as they arise, and on the basis of his own judgment. To be successful the rural teacher must therefore have a ready and accurate knowledge of the principles underlying the three great fields of problems connected with his work—he must understand clearly the organization, the management and the teaching of the rural school.

In general it may be said that to *organize* a school is to make it ready to run; that is, to prepare it to do its work.

What it is to organize a school When the pupils assemble on the first day of the term, they do not constitute a school, but are rather a crowd—so many individuals, each waiting to be assigned to his proper place and work. They are like the wheels and pinions of a watch which have not yet been fitted together. Each pupil must be made a member of a grade and certain classes, have studies assigned, be fitted into a certain routine and regulations, and have definite portions of the day set apart for study and recitations. When this all has been successfully accomplished, the school is organized; it is ready to run. Every wheel is in its place, and the whole machine can be set in motion.

Stated more in detail, it may be said that in organizing a school it (1) must be divided into grades and classes suited to the age and advancement of the pupils; (2) it must be determined what studies each pupil shall take, and the order in which they shall be pursued; (3) a program of daily recitation and study must be formulated; (4) a routine for calling, dismissing classes, moving the school, etc., must be decided on and put into operation; (5) the regulations, or rules under which the school is to run must be determined

and put into effect. When all this has been successfully worked out, the remaining problems will have to do chiefly with the management and teaching of the school. But until the important questions of organization are successfully solved, there is no possibility of success in the other lines of the teacher's work.

The first day of the term is the most important day in matters of school organization. This is true because first **Importance of right beginnings** impressions are the most lasting ones. The children come to school on the opening day alert and curious, highly susceptible to impressions from the teacher and the school. All is anticipation and speculation. Every movement made by the new teacher is watched and every word noted. At intermissions and on the way home the teacher and his methods are discussed; at the farm supper-table the new teacher and the school are the sole topic of conversation, and the impressions formed by the children and carried to their homes soon become neighborhood property. Bad impressions given out the first day will require weeks or months of high-grade service to overcome them, while good impressions at once become to the teacher a source of power and influence both in the school and the community.

The teacher must come to the first day, therefore, with as full information as possible of the problems to be met, **Preparation for the opening day** and with plans carefully matured for the organization and management of the school. The first day must be a success. Nothing must be left to chance. The teacher must show no indecision, hesitancy or doubt in forming the classes, assigning the work, initiating the program, or doing any of the

many other things necessary in starting the school. He must be fully in command of the situation from the first moment, and neither falter nor blunder.

This will require thought, planning and preparation. A recent visit to the principal of a large high school a week before the opening of the fall term found him busy at work in his office. He said, "I shall need to work here every day all this week in arranging the organization of my school. But by the time we have been in session for fifteen minutes on next Monday morning, no one could tell that we had not been running a month." This man was able to hold so large and responsible a position because he was willing to give time and thought in planning and carrying out his work.

Prior to the opening of the term the rural teacher should get the records of the school, and familiarize himself with the names of the pupils last in attendance, with what classes they were in, what texts they studied, how far they were advanced in each branch, and any other facts that will be helpful. In addition to this, the names of the probable new pupils should be obtained, and an approximation made of where they will rank. If the former teacher can be consulted, much light can usually be gained on the matter of the school's organization. Only by such care and foresight can the teacher be ready for the opening day, and make it a success.

A matter not less important than these questions of classification is that of the daily program. Work is the best preventive of mischief and disorder. Idle brains and idle hands are sure to make trouble. Definitely assigned lessons should be under way very soon after the first session opens.

Classes should be called and brief recitations carried out in a regular sequence. The efficient teacher will go to his first day of school with a definite program of recitations in view. This program will probably have to be modified somewhat, but it is vastly better than no program, or one devised at random and on the spur of the moment. While probably the same program will not serve for any two consecutive terms, yet the program of the preceding term is usually the best basis on which to start, making whatever changes are necessary the first day, and continuing these modifications until the program fits the new school.

With such preparation for the first day, brief opening exercises can be had, the names of the pupils taken, a tentative classification effected, lessons assigned, and recitations begun within the first half-hour. This is as it should be. To take half a day to get started is not only a waste of time, but is demoralizing to the school, and shows the teacher to be lacking either in ability to organize and manage, or devoid of the interest in his work which should prompt better preparation for the opening of the term.

It is easier to form than reform. The pupils come to school on the first day expecting that the new teacher will **The initiation of a definite policy** have some plans of his own to introduce and they are usually very ready to cooperate. Anything that is reasonable in the way of a school routine or regulations can be put into effect at the beginning without difficulty. But let the teacher come without definite plans for these things, let the movement of classes and the calling and dismissing of school be haphazard, let the regulations be indefinite or poorly carried out for a few days or a week, and the habits and

standards of the school have become more or less set in the wrong direction. And it then often causes friction and requires punishment to accomplish what would have been taken as a matter of course at the beginning of the term. An ounce of prevention is worth a pound of cure, and a little effective organization is better than much reorganization.

The school routine is one of the most important matters connected with organization. By school routine is meant

The school routine the various movements and activities in which the entire school or classes participate together. Illustrations of routine are, calling and dismissing the school, the passing of classes, the distribution of wraps, materials, etc. All these things should follow a set routine, be done in the same way over and over until they become thoroughly automatic on the part of the pupils. They must become a part of the school habit, so well fixed that they "do themselves." To this end the routine adopted should be simple and natural. A complicated series of signals for calling a class to recite is unnecessary, wastes time, and is difficult to follow.

A cumbersome system of signals, together with lack of executive ability was responsible for the following state

An impossible routine of affairs in one school. The teacher called, "*Third reader class!*" One alert boy turned with his feet out in the aisle. The teacher continued, "*Ready!*" The boy stood up; several others turned ready to rise. "*Stand!*" Several started to the recitation seat. "*Pass!*" Those who started first had by this time reached their places, and the rest came straggling toward the front. "*Be seated!*" concluded the teacher, but nearly all had dropped down on the benches as they came up, and only a few were left to obey the order.

What folly! And what injustice to a school! The signals given for moving classes and the like should be the fewest and simplest possible, and then should be *obeyed to the letter* until obedience has become a habit. Commands that are disregarded are a constant training in carelessness and disobedience to duty, and always weaken the teacher's authority.

The regulations of the school are not less important than its routine. No set of rules can be made to cover **The regulations to be adopted** all the questions of conduct that will arise in the school. Indeed an arbitrary list of rules made and announced at the opening of a term is worse than useless, for it tends to antagonize the pupils and even to suggest misdemeanors that, otherwise, they might not think of. A list of the rules devised by an old New England schoolmaster contained seventy-five specific prohibitions or commands. The story is told that, on looking about the grounds one day, he discovered a pile of old bricks that had lain undisturbed for no one knew how long. But the schoolmaster, desiring to make sure that he had omitted nothing, went back to the list of rules and wrote as the seventy-sixth, "It is strictly forbidden that any boy shall throw bricks at the chimney." And tradition tells that the chimney, which had stood unmolested during many years, was battered down within a week.

In spite of the possible misuse of rules, however, it is necessary to have some regulations understood and **The use of rules** obeyed in the school. It is probably best to have only a general understanding at the opening of the term, like Nelson's famous, "England expects every man to do his duty!" Similarly the school expects every pupil to do his part toward

making the school a success. From this platform as a standpoint, various regulations can be made and the necessity for them shown as occasion arises. For example, the question of whispering is sure to arise early in the term, but better to take up the question when it does arise than to start out with rules on it. The matter of leaving the seats on various errands about the room will need to be decided, but it should be decided when it presents itself. The only danger at this point is in letting such questions *get the start* before they are taken up. The abuse of a privilege will rapidly grow into a habit, and misused privilege comes to be looked on as a right.

No school is well organized until the matter of *classification* has been carefully worked out. To classify a school is to place the pupils in their proper divisions, grades and classes. *Principles of rural-school classification* It is impossible to lay down fixed rules for the classifying of rural schools, since they vary so greatly in size, advancement and curriculum. Yet a general outline may be given which will serve as a basis to be modified as required by each individual school.

One-room rural schools can never be classified as rigidly as town or consolidated schools. This arises first of all from the fact that in very few district schools are all the different grades represented. Particularly is this true in the smaller schools, which often consist of not more than eight or ten pupils. In consolidated schools the classification will be worked out much as in towns and cities. In the average district school of small size, not more than four or five of the eight grades constituting the full rural-school course will usually be represented. Proper classification is also rendered difficult because of the lax methods of promotion obtaining in most of the

rural schools. Pupils are allowed to become very irregular in their studies, far ahead in some and behind in others. Further, irregular attendance often makes it a hard matter to keep the classification even and regular after it has once been properly arranged.

A school of the usual type which has all the eight years represented would, of course, consist of eight grades, one for each year. The classification of the school together with the studies to be pursued, would then be somewhat as follows:

The standard school classification *First school year*—Primer and First Reader. Language, numbers, nature study, music taught orally. Hand-work, drawing, writing.

Second school year—Second Reader. Other first year studies continued orally, with increasing emphasis on hand-work and nature study.

Third school year—Third Reader (first half) with supplementary readings. Elementary arithmetic text, music reader. Pen and ink. Language and nature study, including hygiene, continued orally, hand-work.

Fourth school year—Third Reader (second half) with supplementary readings. Elementary arithmetic, elementary geography, including nature study, spelling-book, music reader, elementary language book, writing and drawing, hand-work.

Fifth school year—Fourth Reader (first half) with supplementary readings. Elementary arithmetic (completed), elementary geography (completed) including elements of agriculture, oral hygiene, language book, music reader, writing and drawing, spelling-book, hand-work.

Sixth school year—Fourth Reader (second half) with

supplementary readings. Advanced geography, history stories, complete arithmetic, elementary physiology language book, spelling-book, music, writing and drawing, hand-work, elementary agriculture.

Seventh school year—Fifth Reader (first half) with supplementary readings. Complete arithmetic, language and composition, geography, history, physiology, spelling-book, elementary agriculture, manual training, domestic science, music, drawing.

Eighth school year—Fifth Reader (completed) with supplementary readings. Supplementary classics, arithmetic, history, geography, elementary grammar and composition, agriculture, manual training, domestic science, music, drawing.

As the rural schools are at present organized, reading is probably the branch most commonly taken as a basis of

The basis of classification classification. Upon this basis, if a pupil comes to school ready to begin the Fourth Reader, he should be entering on his fifth year at school, and should be pursuing the other studies listed for the fifth year, providing that he is even in his classification. Similarly, if he comes ready to begin the Third Reader, he is to be classified in the third year, and should regularly have the studies belonging to this year. If he is not even in his classification, as is often the case, it will, of course, be necessary to allow him to have studies belonging in two or more years. The course of study must not be allowed to hamper the pupil's development. It should, however, be the constant endeavor of the teacher to bring up the subjects that are behind, even at the expense of moving more slowly in those that are ahead, and in this way even up the classification.

The classification here presented is, with slight modifications, that in general use. But every teacher should

**Knowledge of
classification de-
manded of the
teacher**

become thoroughly familiar with the course of study and system of classification in his county or state. He should know offhand such points as

the following whenever he requires to use them in classifying his particular school:

(1) The studies, books and material for each school year.

(2) The studies to be carried together at the same time.

(3) How long each study is to be pursued, and when it is to be completed.

(4) When the elementary and when the advanced text in each subject is to be introduced.

(5) How many classes are to be formed in each general subject, such as arithmetic, language or reading.

Only when the teacher is able to answer these questions accurately and quickly is he capable of classifying the

**Questions to be
met in classifi-
cation**

school correctly, or of telling what is wrong when a pupil is irregular in his classification. For example, if John

Smith appears on the opening day with an advanced arithmetic in which he has reached square root, a Fifth Reader which he has not yet begun, an elementary language book, and a history that he has been over, but no geography or physiology, manifestly he is irregular in his classification. The teacher must know precisely in what this irregularity consists, and how to set at work to remedy it. Likewise if Susan Jones brings a new Third Reader, and along with this an elementary geography and an elementary arithmetic, but no language book, the

teacher must know at once whether these are the right books to go together. It is ignorance of just such questions as these that accounts for the poor classification found in many rural schools, and for much of the poor work that results.

Closely related to the classification of the school is the matter of the daily program. This is one of the rural teacher's most puzzling problems, and a large measure of his success depends on his ability to make and follow a good program. The school in which the pupils do not know precisely what work is to be done and what recitations are heard at every hour of the day is a poorly organized school and its slipshod methods show lack of executive ability in the teacher.

The program of the district school can not be organized as definitely and closely as that of the graded school, yet **Principles underlying the program** there are certain principles underlying the making of the program that will hold for all schools. And the fact that the rural teacher is so crowded for time makes it all the more necessary that the program be well devised.

It is evident that the hardest or most important studies should be placed in the best parts of the day, that is early in the forenoon and afternoon sessions. As most of our schools are now organized, the most important branch for the lower grades is reading. This should therefore be placed at the beginning of the session, or as near the beginning as possible. For the more advanced classes, arithmetic or language may be taken as the hardest study, and hence be given the best position. Other studies should be arranged in order of difficulty in gaining attention and interest.

The sequence of studies It is difficult in a school which is irregular in its classification to arrange a program so that every pupil may have time to prepare for each successive recitation. The program should, if possible, provide for an alternation of study and recitation in such a way that the pupil studies each lesson shortly before he recites it. This is not so necessary in the higher grades; the seventh and eighth grades may even prepare for an early morning recitation before the close of school the preceding day, or in the evening at home.

The distribution of time Care needs to be exercised that certain lines of study, such as arithmetic, geography, agriculture, or any other subject, do not receive more than their just share of time. A teacher who has a fad for number work, nature study, or any other branch, has a tendency to emphasize this subject at the expense of others. Also, poor classification may sometimes result in more classes in some subjects than they deserve. One school of fourteen pupils had seven classes in spelling, when it ought to have had but two. Another had five classes in arithmetic, when there should have been but three.

Classes crowded out If a school is poorly classified in, say, its higher grades, this has a tendency to multiply the number of classes for these grades, and so give them more than their just proportion of time. Likewise if a teacher enjoys better the work of either the higher grades or the lower grades, there is a temptation to give more than its rightful share of time to the more pleasant work to the injury of the other. Sometimes the program has so many classes that some of them get shut

out occasionally. In case this should occur it is usually best to leave out some of the more advanced work rather than that of the beginners. A still better plan if the program is too badly crowded is to hear some of the more advanced classes on alternate days.

Most rural schools have too many recitations. The average in many counties reaches nearly thirty a day. Of course it is utterly impossible to teach this number of classes and do them justice. The largest number of classes that should be attempted in any school is about twenty a day.

Some of the chief causes producing the multiplicity of classes are as follows: (1) Poor correlation and classification. Not infrequently separate classes in spelling could just as well be put together. Separate classes in arithmetic are often allowed when their work is only a few weeks or a month or two apart. And so with the other studies. The teacher should know how many years are to be put on a given text, and then try to arrange the distance between the classes on this basis; e. g., three years are usually to be devoted to the complete arithmetic. Classes in arithmetic should not therefore be nearer together than one-third of the text, even when all grades are represented in the school. (2) Irregular attendance. Not infrequently children are kept out of school to work for a few weeks, and then it is expected that new classes shall be formed for them on their return. This is unfair and should not be allowed. Parents should be urged to keep their children in school regularly, but in no case should the interests of the whole school be made to suffer through starting new classes for the irregular pupils. (3) Attendance of children below school age. Many states

allow their children to enter school at five years of age. This is probably a full year too early. In spite of this fact, however, there is hardly a rural district in most states in which children are not sent to school before reaching the minimum age. This should never be allowed. It is bad for the child, and usually results in the necessity for organizing new classes for these beginners. If the board will not exclude children under age, the teacher should at once report to the county superintendent, whose duty it is to see that the school laws are obeyed in his county.

The proper correlation of subjects in teaching will do much to render unnecessary the multiplicity of classes found in many rural schools. Spelling can often be taught more effectively in the regular work of other classes than in any other way. Language work and composition find their best basis in nature study, geography, hygiene, agriculture, and similar practical subjects of the course, and can be so combined with them as to render the teaching of both more effective. The arithmetic lesson may often be based on the work going on in manual training or domestic science, and time saved for other work. Indeed, the principle of correlation, already suggested in a former chapter, will, if properly applied, relieve the overcrowding of the program and increase the efficiency of the teaching.

FOR TEACHERS' DISCUSSION AND STUDY

1. Is it reasonably safe to concede that a teacher who has made a success of a country school will be successful in the same grade of work in a town school? Is there

any difference in standards to be taken into account? In methods?

2. Have you observed schools that were unsuccessful because of faulty organization? Can you point out where the difficulty lay?

3. Have you observed differences in "first days" illustrating the points made in the chapter? What is your own plan for opening day? How much time do you spend familiarizing yourself with the school records before the terms open.

4. Have you ever found the records left by a former teacher so faulty as to be of little service in organizing the new term? What is your opinion of the professional ethics of a teacher who will leave defective records?

5. Make a full statement of what you consider the best routine for a one-room rural school; that is, a plan for calling and dismissing school, passing classes, handling wraps and supplies, and all else that should be included under the term *routine*. Also, discuss what regulations should be adopted to govern the conduct in the school.

6. Have you observed that certain forms of disorder, such as whispering, leaving the seats on errands, etc., have a tendency to grow? What is to be done to prevent them from becoming school nuisances?

7. Can you name, offhand, the studies and texts to be used in each grade of your school? If not, do you know where to go for such information?

8. What measures have you ever tried to reduce the number of recitations in your school? Can this be done in many rural schools without injustice? Or is it an injustice to all for the teacher to attempt to teach twenty-five or more classes a day?

CHAPTER XII

MANAGEMENT

This is the day of scientific management. Executive capacity, or the ability to manage, is at a premium in every line of occupation. In the business world almost fabulous salaries are paid to those who are able successfully to direct the activities of important commercial enterprises. These men do not themselves make or sell goods; it is their part to supply the best possible conditions under which goods may be produced and sold; they are managers. Likewise, in the educational system, the highest honors and salaries go to those who are able to act as managers of a system of schools. And here, as in the commercial world, it is the business of the manager to supply favorable conditions under which the work of the organization shall go on.

In the rural schools, as we have already seen, the teacher is the sole manager of the school. The school

Rural teacher's sole responsibility in management board can not well take part in this function, and the county superintendent is unable to be of material assistance. The responsibility is on the teacher alone, and the problems are many and difficult. The reputation and success of the teacher as measured by the general public are gaged largely by his ability to manage. This counts with most patrons for more than even the matter of organiza-

tion or teaching, for it is more easily understood and judged. The classification and grading of a school may be faulty, its program poorly planned, or the methods employed in instruction ineffective, and the public know little about it. But let the management of the school prove weak, let the teacher fail properly to control the school, or let his methods of government be such as to produce friction, and the whole community soon know of the trouble. If the school machine creaks in its running, the creaking is sure to be heard and to attract unfavorable attention.

We may organize a school once for all at the beginning of a term, but the school must be *managed* day after day. What managing a school means as long as it runs. For no school, however well organized, or the teaching ever so good, will manage itself. This requires great skill and constant alertness on the part of the teacher.

Managing a school means much more than governing it, in the sense of keeping order. To manage a school is so to direct it as to obtain the *largest educational returns with the least possible friction and waste of time and effort*. In a well managed school each pupil will be doing his work in such a way as to gain the greatest good for himself, without interfering with the work or welfare of others. It is the business of the teacher, as manager of the school, to provide such conditions that these results are obtained.

This is not easy. A great part of the proverbial weariness and fag of teachers comes from the strain of managing the school. It is not the strain of actual teaching, but the worry arising from responsibility, tension, or conflict in management that results in frayed nerves and exhausted bodies. For the sake of efficiency in the work

of the school, therefore, and for his own welfare and happiness, as well, the teacher needs to master and put into practise the principles of good management.

Lying at the basis of all successful management is the *spirit of cooperation*. A school can not be forced or driven against its will without great loss in efficiency. Energy and thought which the teacher should devote to instruction must be expended in compulsion. Effort and attention which should be given by the pupils to their studies are directed to misdemeanors or resistance. It is impossible to gain good results while thus working at cross-purposes. A spirit of antagonism is fatal to progress on the part of the pupils and to growth and efficiency on the part of the teacher.

This does not mean that the control of the school must be lax and that discipline and order shall fail in order to keep the good-will of the pupils. On the contrary, nothing is more certain to forfeit the pupils' respect and good-will for a teacher than weakness and uncertainty in government. Children expect the teacher to control the school, and hold him in contempt if he does not.

But there is a great difference in the way this control is manifested. One teacher, in governing the school, causes friction, hard feeling and antagonism; another teacher, by a different method, not only obtains better control of the school, but also holds the good-will and respect of the pupils. The difference lies largely in the ability of the second teacher to win the cooperation of the school, whereas the first teacher has to depend on the force of authority.

**Cooperation refers
to the method of
control**

The foundation of cooperation is the realization on the part of both the teacher and the pupils that the school is really the pupils' school, and not the teacher's school nor the board's school. When once they come to see that poor work or wrong behavior in the school is harming *their school*, and not the teacher, their interest in the school will increase and their attitude toward it will change.

The children can not be made to feel an ownership in the school merely by lecturing to them about it, nor by explaining to them their loss when things go wrong in the school. They must arrive at this idea in a very concrete and practical way. For example, the teacher feels that certain regulations should be adopted. In putting these regulations into operation, he must avoid giving the impression that such regulations are made because of any whim or notion of the teacher himself. He should rather seek to show that such regulations are made because the work and success of the school demand them. Likewise, corrections, rebukes, punishments, are not to gratify any love of the teacher for these things, but because the success of the school requires them.

One of the greatest foes of cooperation in the school is scolding. The teacher is subject to many trials and provocations, and is often worn and fagged. And, says President Henry Churchill King, "It is hard to be decent when we are fagged." The result is, that many teachers are scolders, growing into the habit gradually, and finding themselves in its grip before they are aware. There are two bad things about scolding: one is that it arouses antagonism and renders a spirit of cooperation impossible; the other

is, that it ultimately does no good. For children easily become hardened to faultfinding and criticism, or they become sullen under their sting, and accept them like any other disagreeable thing of life, without taking them too seriously. Said one schoolgirl, "We would rather have Miss White scold us for half an hour than to have Miss Gray look displeased."

It is a great accomplishment to be able to correct, rebuke or reprove in a spirit of entire friendliness. Many can not do this. There are those who are unable to differ with us even on matters of opinion or belief without bearing a personal grudge because of these differences. Two neighbors of this type, one an ardent Democrat and the other as strong a Republican, were good friends except at the time of election campaigns, when they ceased all neighboring together and would hardly speak to each other. The teacher needs to cultivate that breadth of personality and warmth of sympathy that will enable him to correct a wayward child, even with great severity if necessary, keeping his heart so warm toward the culprit all the time that no tinge of antagonism creeps in. One may learn to abhor an offense while he loves the offender.

One of the most valuable lessons the school has for the child is the lesson of *obedience*. If the spirit of co-Good management operation obtains in the school, secures obedience the child's obedience is to the needs and demands of the school itself. These needs and demands are expressed in the rules and regulations set forth by the teacher, but they come no less from the necessities of school.

The term *obedience* is here used not alone to signify conformity to the wishes or requirements of the teacher,

but also to the regulations and routine of the school. If a certain set of signals has been agreed on for the passing of classes, for calling and dismissing school, then this routine is to be followed absolutely and exactly. If certain regulations have been adopted relative to whispering, leaving the seats, or other privileges, then these regulations should be obeyed both in spirit and in letter.

Rules that are not obeyed are far worse than no rules at all, for they beget contempt for law and authority.

**Disobedience be-
gets contempt
for law** Better a thousand times a few simple regulations well complied with than a complex set which can not be enforced. The child who has learned in the school the lesson of obedience to authority and the rights of others has been given one of the most valuable elements of education. The child who has had his schooling in a school where the lessons of obedience were not learned, has incorporated in his education an element of weakness and danger.

The only way to learn lessons of obedience is to *obey*, just as the only way to learn moral truths is to live them, **Obedience learned
only by obeying** and the only way to learn patriotism is to live and act patriotically. The difference between theory and practise in these things was well illustrated in an incident that recently occurred in a certain rural school. The morning opening exercises were being conducted. As the roll was called, each child responded with a patriotic verse or selection. A patriotic song was sung, and then all stood and together saluted the flag that hung at the front of the room. It was a beautiful exercise, well performed. But the trouble was, that within the next half-hour anarchy prevailed in this room in the presence of the flag

that had so recently been saluted. Law was violated, the rights of others were disregarded, and authority was trampled upon. The lesson in patriotism was negatived by the conduct of the school. These children needed, more than they needed anything else, to learn the lesson of obedience to authority.

Good school management requires that the teacher shall be *uniform in requirement* from day to day. He must **Good management** not to-day tolerate or take lightly an **requires uniformity** offense that yesterday he took seriously and punished. He must not be subject to moods and whims, making the control of the school grow chiefly out of his own attitude and feeling. He must himself obey constantly from day to day the standards he has set up for the control of the school, and should no more suffer himself to be lax in requiring obedience to rules, regulations and standards, than he would suffer his pupils to disobey in these things.

This is a very severe demand to place on the teacher, but it is well worth striving for. It is worth while to be able to live above one's whims and moods, to be equable and pleasant no matter how one feels, and to be kindly insistent when one would prefer to let the wrong act go by. Such heroic training of one's self will give poise and balance to the character as will few other things, and will prove an acquisition well worth having outside the schoolroom.

The necessity for persistence and uniformity on the part of the teacher has been demonstrated to every **Tendency of schools to "run down"** teacher in the tendency of schools to "run down" if given a chance. On starting a new term, the teacher begins with certain ideals of management and control. For

a little time all goes well, but soon the teacher sees an increasing laxness in certain matters. Whispering is growing, obedience to signals is less prompt, playing roughly in the schoolroom at intermissions begins. It is just at this point that the strong teacher wins and the weak teacher fails. The strong teacher calmly and firmly insists on the school's living up to the requirements; and the school comes back to them. The weak teacher does not know how, or has not the force to check the downward tendency, and things go from bad to worse. Eternal vigilance, and an immovable kindly steadfastness of purpose are the price of uniformity of control in the school.

No personal quality is more in demand in the schoolroom than *self-control* on the part of the teacher. He

Self-control necessary to management who can not control himself should not expect to control others. Every exhibition of uncontrolled temper is

a confession of weakness, and lowers the teacher in the respect of the school. Fits of anger indulged in by the teacher engender a feeling akin to contempt on the part of the pupils.

A group of girls just graduated from high school were discussing their teachers, and commenting on their characteristics. One of the group remarked: "Now there is our principal; maybe you think we didn't make things interesting for him! We girls used to meet together evenings to devise ways to torment him." On being asked why they had a pick at this particular teacher, she replied: "Oh, we really had nothing against him; we only wanted to see him 'perform,' and he never disappointed us. We were willing to take any sort of scolding just to get him started upon a tirade."

This man had no right to occupy the position of teacher. One who can be led to "perform" at the beck of a group of mischievous pupils lacks the self-control necessary to the respect and cooperation of his school. Further, the heat of anger clouds the judgment and makes fairness and justice impossible. What teacher who is subject to fits of temper has not said or done things under the spur of anger which seemed perfectly justifiable and right at the moment, but which caused regret and shame when later looked back on! Or what such teacher has not, when he has had opportunity for calm thought, been obliged to reverse some rule, demand or threat voiced in a moment when self-control was lost!

Nor are teachers possessing this lack of poise and judgment always fair enough to take back a hasty rule **An example of hasty judgment** or demand even when convinced of its injustice. A teacher in a western rural school who was accustomed to "perform" on slight provocation had been annoyed by caricatures of herself drawn on the blackboard during her absence from the room. One day a worse drawing than usual appeared. The teacher angrily turned to the school and demanded, "Who did that?" No one replied. Again the teacher asked for the culprit, and was met with silence. This angered her still more and she issued her ultimatum: "This school will get no more recesses until some one tells me who drew that picture." Of course no one would tell, so recesses were cut off, and the school grew sullen from injustice. Neither side would give in, and friction developed into rebellion. The upshot of it was that the school board ordered the teacher to grant the school its recesses, and the teacher quit the school in humiliation and defeat.

Self-control on the part of the teacher must also extend to his dealing with the patrons of the school. **Control with reference to complaints** rents are not always wise or just in matters concerning their children. Happy is the teacher who is not now and then visited by irate fathers and mothers who claim that their perfectly peaceable child has been assaulted on the way to school, or that his dinner has been stolen, or his books or pencils appropriated by other children. When such a situation arises, the teacher possessing tact or self-control will satisfy the parent, and bring the interview to an end in friendship and good-will. The teacher who lacks control will be likely to bring on a stormy interview that decides nothing, and which leaves bitter feelings to rankle after the trivial cause of the interview is long forgotten.

No discussion on school management can point out all the problems that will arise in the course of a term, "Danger points" for the unexpected is likely to appear in management at any moment. There are, however, certain problems that present themselves in most schools, and may therefore be called the "constant" problems, or the "danger points" in school management.

One of these is *boisterous play in the schoolroom during intermissions*. There are many reasons why children should not be rough and noisy in the schoolroom at intermissions. The first of these reasons relates to the effects of what the psychologist calls *suggestion*. Any part of our environment comes to suggest to us the activities that we perform in connection with this environment. The dining-room suggests eating; the church, reverence and worship; our study table, concentration and effort; and so on

throughout the whole circle of the objects and places with which we are most familiar.

Now if the schoolroom is used solely as a study place and as a workshop for our lessons, it will come to suggest these things to us and make it easy to study and work when in this environment. If, on the other hand, the schoolroom is used as a playground or a gymnasium, a place where noisy play, shouting and hilarious laughter are the rule, it will come to suggest these things to us, and make it harder to settle down to serious behavior and sober study. In many schools no talking except in a conversational tone is permitted during intermissions, and no moving about except in a quiet orderly way. This regulation is a hardship on no one, and tends to make the government of the school much easier.

A second reason why children should not play in the schoolroom at intermissions is, that they should be out-of-doors in the fresh air. They should also have the greater freedom and opportunity for exercise given by the playground. In very stormy weather it may be impossible to play out-of-doors. It is then that the resourceful teacher will propose and help carry through some of the more quiet games, which are suited to the indoor play hour. In this way he can not only teach new games to the children, but can himself come to know them better and win more fully their confidence and friendship.

Whispering and note-writing are another schoolroom danger. Communicating with others by means of oral or written speech is so natural and harmless an impulse that at first thought it seems strange that it should need

to be classed as a schoolroom misdemeanor. Yet even very harmless impulses sometimes require restraint. Bookkeepers at adjoining desks do not converse as they add columns of figures; telegraph operators do not talk while they are sending messages; the musician does not whisper to a friend as he plays. These things all require individual attention. So with the work of the school. Lessons must be learned through application and concentration. Constant interruption is a serious and unnecessary waste of time. And besides this, the child needs to learn self-control; he needs to learn to be quiet and keep his thoughts to himself, as well as to express them.

Nor does it help matters if children are permitted to whisper "about the lesson." This is precisely what they ~~should not need to do if the assignments have been properly made and the child has given attention to the teacher's directions. In addition, such a plan is sure to lead the child to lack of frankness. Other things than the lesson will be discussed, and the moral sense of the child be dulled by this deception.~~ Whispering during study time should be reduced to the lowest possible minimum.

Note-writing is even a more insidious danger in the school than whispering, for it is harder to detect, and it ~~No truce with note-writing~~ has greater possibilities of evil. Notes can be passed slyly from desk to desk, or left in books, or delivered personally on the pretext of some errand, and even the alert teacher finds it hard to discover the culprit. Not infrequently, also, school notes contain improper language or suggestion which the writer would not dare to convey in oral speech. Note-writing is so unnecessary to the work of the school

and contains so many possibilities of harm that it should be as completely eliminated as possible.

Unnecessary questions and moving about the room should be reduced to a minimum. Ability in management is shown nowhere better than **Unnecessary confusion indicates poor management** in the power to foresee the necessities of the school and so provide for them that unnecessary interruptions shall not occur. Nine out of ten of the questions commonly asked in the rural school could be forestalled by taking care of the details of lesson assignments, the matter of pencils, books, note-books and the like. A full supply of all the latter should be had by every pupil, and no borrowing be allowed. The same kind of care and attention to details will render unnecessary most of the passing about the room by the pupils during school time.

Questions are sometimes asked just for the sake of asking them, and children wish to leave their seats for **A cure for "questions"** the sake of the change and the rest from sitting. They are not to be blamed for this very natural desire, but it can be gratified in a better way. Let the teacher take two or three minutes in the middle of the session, have the windows and doors thrown open, and every one march around the room to music, or go through a set of calisthenic exercises. This will afford the needed change and relaxation for the whole school. The teacher must then kindly but firmly insist that no unnecessary interruptions shall occur.

Injury to public property should be carefully guarded. Children can very early be taught principles of justice and honesty toward others, and the school offers excel-

lent opportunities for such lessons. If school property is injured either wantonly or accidentally it is evident that the first thing to do is to repair the damage. The child should be made to see that the taxpayers of the district have supplied the schoolhouse and equipment for the use of the school, but that these things belong to the district. In one rural school a boy was found to have marred a newly decorated wall of the school building. He was sent for a workman to come and repair the wall, and the bill was presented to the boy and paid by him out of his own earnings. The boy learned through this incident a practical lesson in business honesty, which could never have been taught him theoretically.

Our people are sadly lacking as a nation in the respect for public property. There are those who will ruthlessly deface public buildings, parks, toward vandalism or even monuments in order to obtain a little souvenir to carry away. Others will commit such acts of vandalism wantonly. The most effective cure for these things lies not so much in lectures on morals and ethics, as in inculcating practical lessons in morals and ethics by making them a part of the *conduct* of the children in the school, the community and the home. The child must learn that the first step in either repentance or reparation is, so far as it is possible, *to make good the injury*.

The question of morality is insistent in every school. The matters which have just been discussed are of such nature that they apply more or less generally to the entire school. But some of the most difficult problems of management grow out of the occasional case of immorality. It is an excep-

**Children's morals
to be guarded**

tional school which does not have some child who uses profane or improper speech, or whose conduct does not in some other way suggest immorality. The pure-minded child should be protected from this moral contagion. One such center of immoral influence in the school, if left unchecked, may spread until the whole school is contaminated.

The detection and prevention of such influences is one of the teacher's most difficult tasks. The teacher must not be suspicious and spying in his attitude toward the pupils; but, on the other hand, he must not be blind or deaf to what is going on. He must be thoroughly alert to what is taking place not only in the schoolroom, but also on the playground. He must know the morals of his pupils if he is to protect the innocent and reform the wayward; and this constitutes both an opportunity and an obligation.

FOR TEACHERS' DISCUSSION AND STUDY

1. Counting up all the acknowledged failures among teachers you have known, were most of them failures in management? Is it possible that some fail in instruction, but their failure is not so easily discovered? Do some fail in instruction because they first fail in management?

2. Judging from your observation, what are the most troublesome points in the management of a rural school? Can you suggest how such troubles may be avoided?

3. What, in your judgment, is responsible for the attitude of so many pupils who seem to look on the teacher as a natural enemy, and feel it a personal triumph if they succeed in playing some trick or committing a misdemeanor without being discovered? What is the remedy?

4. Do you agree with the position taken on scolding? Does the habit have a tendency to grow on a teacher? What is a good substitute?

5. Do you find it difficult to be uniform from day to day in your requirements and government? Can you relate any inequalities to lowered vitality or impaired health? To bad nerves?

6. Did you ever go to school to a teacher who had fits of temper? If so, did the school look on exhibitions of temper as a weakness and lose respect for the teacher because of them?

7. Do you believe in corporal punishment? If not, what is your substitute? Is sarcasm or ridicule to be preferred to whipping? Should a child usually be punished before the school (effect of making a martyr of him)? Should punishment take place while teacher or pupil is angry? What are your tests of the effectiveness of punishment?

8. Do you know your legal rights as fixed by the laws of your state in governing and punishing a pupil in your school? Some states do not define the teacher's rights in detail, but simply say the teacher stands *in loco parentis* to the pupil. What powers are thus given?

CHAPTER XIII

GOOD TEACHING

Important and necessary as good organization and management are in the school, they can never be an end in themselves. Both exist only to provide the conditions under which *teaching* may go on. Teaching, the actual instruction and guidance of children in their learning and development, is the ultimate purpose for which we erect our schoolhouses, organize our schools and pay our school taxes. And no matter how excellent the building and equipment, how perfect the organization of the school, or how skilful its management, these all fail of their aim if they are not crowned by good teaching. The true teacher will therefore always have before him a triple ideal for his school—careful organization, efficient management, and good teaching; but the greatest of these is *teaching*.

Good teaching requires first of all that the teacher shall meet the children on their own plane, be able to put himself in the child's place and look at the problems and difficulties of learning through the eyes and mind of a child. Children do not know how to study, for study is an art and has to be learned the same as any other art. When the children first enter school they are fresh from the work and the play of home life, accustomed to deal with real tasks

and concrete objects. We place in their hands books full of symbols of which they know nothing, and dealing with lines of thought unfamiliar to them. We tell them to get their lessons, but they do not know how. And even after they have learned to recognize words and their meanings, the process of gathering and unifying the thought of a printed page is difficult. Those of us who have studied a foreign language have not forgotten how possible it is to know all the separate words of a paragraph or page, and yet find great difficulty in collecting the thought of the whole.

How often children say to the teacher, "I don't know how to study this lesson." Or, "I don't understand how **Need of teaching** to begin on this." Every such confession is in some sense an indictment of the teacher, one of the chief of whose functions is to *show the child how to study*. It would do many teachers good to try an experiment sometimes given to college classes in psychology. The students are given slips of paper on which is printed an easy story consisting of about two hundred words. Each student is to read this story aloud as fast as he can with good expression. The average time required is about seventy-five seconds. Next, the class is given similar slips with another easy story of the same length. But this second story is printed in reverse order from the bottom of the page upward, and without capitalization or punctuation. The students are to read the story aloud, the same as the first one, as rapidly as possible. The average time required for the second story is nearly five minutes, and the reading sounds for all the world like a First-Reader pupil puzzling out unfamiliar words. We often forget

that the page of a book is as new to the child as the reversed page is to the college students.

The teachers in the elementary schools of Germany give a large proportion of their time, especially in the lower grades, to showing the children how to study the lesson assigned. New words are learned, difficult points explained, important sections or divisions noted, and the whole method of work to be followed is suggested or outlined. How far this is ahead of our very common custom of saying, "Take the next two pages," and leaving the children to flounder helplessly in the dark when they come to study the lesson.

Good teaching inspires *confidence and courage* in the pupils. Nothing is to be gained by telling children that they are dull or backward. Prob-
Good teaching en- courages the child ably four out of five laggards are failing more from *discouragement than lack of ability*. A thoughtless teacher was one day called by an uplifted hand to the desk of a glum-looking boy. Joe was having trouble again with his examples. "O Joe," complained the teacher, "you are so dull! I am afraid you will never learn arithmetic." Now this was precisely what Joe himself feared, and the judgment of the teacher only drove the conviction more deeply into the soul of the disheartened boy. What Joe needed was sympathy and encouragement, and a teacher wise enough to find out the faulty place in his reasoning and to help remedy it. An army or a football team which enters a conflict expecting defeat is already half beaten, and a pupil who starts on a lesson sure he can not master it has already failed.

The teacher should be able to radiate good cheer, confidence and encouragement as radium discharges energy, **The value of good cheer** without appreciably diminishing the supply. The schoolroom ought to be the brightest and happiest place anywhere to be found. For the feelings and emotions lie very close to our intellectual powers, and the full capacity of our minds can never be called into play except under the stimulus of belief in ourselves and happiness in our work. The teacher must know how to render sufficient help to set the powers of the child at work, but must not do the work himself, and thus leave no effort or victory for the pupil. It is possible to do too much for the child just as it is possible to do too little; it is easy for the teacher to recite for a backward or poorly prepared pupil and save him the trouble. The best teachers are therefore not those who do most for the pupil, but those who lead the pupils to do most for themselves.

Good teaching requires *interest and enthusiasm* on the part of the teacher. These are of first importance, for **The contagion of interest** they are contagious. Nothing can take their place. No amount of learning, no determination to do one's duty, no display of false or forced vivacity will answer. The teacher who lacks a true and deep-seated interest in his work is a dead teacher, no matter how many degrees he may hold. And through what we call the influence of suggestion, this deadness of spirit is felt by the class and tends to shape their attitude toward study. It is safe to say that no class is ever found giving themselves whole-heartedly and gladly to a subject which their teacher has no interest in teaching, nor is a lifeless class possible with an enthusiastic and inspiring teacher.

The skilful teacher keeps close to the *every-day interests and experiences of the pupils*. He does not substitute rules and definitions for real contact with the child objects and experiences. He uses the text-book in his teaching, but is not hampered and bound down by it. He illustrates difficult points by applying them to the immediate activities and knowledge of his pupils. This point of view is illustrated in the case of a ten-year-old schoolgirl who was one day walking with her father along the brow of a hill on one side of which nestled a beautiful little valley. The father said, "See, Marian, what a pretty valley!" Marian stopped short and gazed at the valley. After a moment she exclaimed, "So that is a valley! Why, we have had valleys in our geography at school, but I would not have known that this was a valley." These poor children had committed definitions of valleys, and spelled all the words relating to valleys and learned the names of many far-away valleys and answered the questions out of the geography, but the half-dozen valleys that lay within sight of the school-room windows were unknown and unrecognized by them. So dead and dry and senseless may teaching become!

The teacher's *point of view* has much to do with his skill in teaching. It makes all the difference in the world whether one is teaching *arithmetic*, or teaching *children*. And it is much easier to teach arithmetic than to teach children. Professor Dewey made this point clear when he said, "When the teacher comes before his class he should have his subject-matter so well in hand that it is second nature to him; he can then give the best of his power and enthusiasm to the work of *interpreting the pupils*,—to studying their needs, leading their thought, and developing their interest."

One teacher, fresh from a normal school, complained to the superintendent that the children of her school were below the average and not normal children in their studies. The superintendent asked her the reason for her conclusion, and she replied: "You see it is like this; I have been at the state normal school, and there we were required to work out lesson plans and outlines for all branches we were to teach. Now I have been using those outlines and lesson plans just as we were given them, and the children are unable to understand or do the work." When it was suggested to her that she reconstruct her outlines and plans until they fitted the actual boys and girls of her school, instead of expecting the boys and girls to fit into ready-made plans, the idea seemed new to her. But this girl had the willingness and ability to change her point of view, and she is to-day a successful teacher of *boys and girls*, whereas she was formerly an inefficient teacher of grammar, geography and arithmetic.

Teaching is done chiefly in the recitation. This is the teacher's point of contact with his pupils; here he meets them face to face and mind to mind. It is in the recitation that the teacher succeeds in stimulating and inspiring to aims and ambitions that lead to a full and helpful education, or else fails to feed the fires of ambition and thus leaves the child indifferent to training and self-development. The teacher's success or failure in the recitation is therefore the ultimate measure of his value to the school.

Although recitations must differ greatly for different subjects and in different grades, yet certain fundamental **Principles governing the recitation** requisites apply to all recitations. There are a few vital tests by which

the teacher can estimate his own success, and the efficiency of the recitation.

Does the recitation grip the *interest of the class*? Are all mentally alert, and giving attention because the interest of the recitation, and not the teacher, compels them. The writer has elsewhere said: "A recitation without interest is a dead recitation. Because it possesses no life it can not lead to growth. Nothing can take the place of interest. Fear may for a time drive to work, but it does not result in development. Only interest can bring all the powers and capacities of the child into play. Hence the teacher's first and greatest problem in the recitation is the problem of interest. To obtain interest, he must use every resource at his command. This does not mean that he is to bid for the children's interest with sensational methods and cheap devices. This is not the way to gain true interest. It means, rather, that he is to offer to the class subject-matter suited to their age and experience, and presented in a way adapted to their capacity and understanding; that he is to have all conditions surrounding the recitation as favorable as possible; and that he is himself to be constantly a source of interest and enthusiasm."¹

Does the recitation move with *snap and vivacity*? This does not mean noisily and after a scatter-brained fashion. The recitation that does not give opportunity for must have life calm thought and mastery; it rather refers to the continuity of thought and action necessary to preserve an unbroken line of interest. A successful story or play must have what we call "movement." Something must be taking place, so that interest and attention are sustained. Nothing is more uninspiring than

¹ *The Recitation*, page thirty.

a recitation that drags, with pauses and breaks caused by the unpreparedness, or lack of skill or interest on the part of the teacher. A fair sample of this type of recitation was heard by the writer in a western rural school. It was a Fourth-Reader class reading *Paul Revere's Ride*. The class was called, and came sauntering aimlessly down to the recitation bench. The teacher was sitting listlessly behind her desk. A little girl offered the teacher her text, which was accepted without recognition of the courtesy. The teacher said, "John, you may read the first stanza." John arose lazily and read it with no show of enthusiasm. "Mary, read the next." Mary read the next. "Joe, you may read the next." Joe complied. So they went on until five stanzas had thus been read. This completed the assignment. The time was not yet up, so they read the lesson through again after the same fashion, with no comment, suggestion or explanation. The teacher assigned the next lesson, and the class was dismissed. Not a word had been said about the historical setting of the incident, not a thrill of patriotism had been aroused, and not an appeal had been made to the imagination. The whole lesson was a dismal failure, a bore to the teacher and an imposition on helpless childhood. Shame on such teaching and such a teacher! Better a thousand times give these children the stirring poem to read by themselves than under the stifling influence of such a personality; or even turn them out on the playground or set them at work in their homes rather than subject them to the benumbing influence of such spiritless instruction.

Are the *whole class taking part* in the recitation? This means not alone in reciting when they are called on, but

all the time. Or, on the other hand, do those who are not for the moment reciting, wander in their thought, and **Every pupil must take part** really take no part in the development of the lesson? The questions asked by the teacher, the explanations given, or the answers rendered by the one reciting must be made to command the thought of all. If the attention lags and the attitude of the pupils becomes listless while they are not being called on, this may be taken as an evidence of failure in the recitation. Thinking can not thus be done in piece-meal and be efficient. Further, the pupils need to learn the lesson of giving sustained attention. They must learn to think a reasonable length of time continuously, without faltering or lagging. The remedy for this inattention on the part of the class is not, however; scolding, or rapping on the desk for attention, such as is heard in many schools. It is inspiring teaching and enthusiasm on the part of the teacher.

Is each pupil in the recitation *receiving his share of opportunity and requirement?* A temptation constantly **Each to receive his share of attention** to be guarded against is that of calling chiefly on the bright and ready pupils. The recitation moves off much better if we do not call on the bungler or the slow-coach. The sparkling eyes and ready lips of the well prepared pupil are a potent invitation to ask him the question that should go to the backward one. The child slow in expression or understanding must have his chance ; he needs encouragement in expressing his thoughts, and can attain freedom only through practise. And it may also be true that the too-ready child needs to learn control, and to cultivate the habit of thinking before he speaks.

Does the teacher by *skilful questioning* and by building on what the pupils already know lead to understanding?—or does he *tell* method of teaching the facts himself? Ever since the days of Socrates the method of developing knowledge in the mind of the child by skilful questioning has been accepted as the best and most natural way. Yet many teachers do not make good use of this method. It is much easier for the teacher to recite the troublesome point himself than to lead the child to see it through a series of questions; hence the lazy or thoughtless teacher falls into this rut. Other teachers talk too much in general. They know the subject well and like to talk about it, so they do most of the reciting for the pupils. Still others, after having called on a pupil to recite, will interrupt him and go on to finish the discussion themselves. This is not only bad manners, but even worse pedagogy. Children learn to do by doing, and knowledge becomes clear and usable only through its expression. Let the teacher therefore set a guard over his own tongue, and cultivate the art of questioning.

Has the teacher learned *the art of questioning?* For questioning is one of the most difficult arts to master, and Questioning a
confine art one over which few have perfect control. Is the teacher tied down to the text-book in questioning, asking the questions in the language of the book? One can not teach until one is able to declare his independence of a book. This does not mean that he may never refer to the text in the recitation. But it does require that he know the general subject and the particular lesson so well that he is not dependent on the text for his questions. Anything less than this is mere testing or catechizing and can not be called teaching.

Do the questions follow one another in a *natural sequence* determined by the lesson to be developed, or are **Principles of good questioning** disconnected and haphazard? Only the teacher who is thoroughly master of his subject can build his successive questions on the pupils' answers, clearing up a point here, emphasizing a truth there, and making the whole series result in a coherent unified knowledge of the lesson.

Are the questions *clear*? Often children do not know how to answer a question because they are not certain what the question means to ask. Here are some questions recently asked by rural teachers in their recitations: "What *about* the fish in the Mammoth Cave? Why has a cat fur and duck feathers? What *happens* when it lightens? What of the animals in the temperate zone? How does tobacco grow?" Not one of these questions is clear, and hence none will admit of a definite answer. They are all the result of loose or careless thinking, and betray the teacher's lack of skill.

Are the *standards* of the recitation sufficiently high? Is the work thorough so that it will do to build on for **The recitation demands high standards** later study? Much time is wasted in our rural schools by stopping short of reasonable mastery. Children are trying to work in percentage when they can not handle the decimals involved; they are attempting denominative numbers and measurements when they can not use simple fractions. Likewise, we find them in advanced parts of the grammar when they can not recognize the parts of speech in a sentence, or pick out the subject and predicate. And so with the other subjects. Most of this inexcusable waste of time, effort and interest on the part of the child may be laid at the door of the teachers who

did not take the time or trouble to insure mastery of fundamentals before passing from them.

Further, the children need for their own sake to be trained in high standards of excellence. The child who is set a task, and then let off with the task poorly done, or not done at all, has had an element of weakness and danger built into his life. On the other hand, the one who has been taught to measure up to all reasonable requirements and to set a high standard for his work, has added an invaluable element of strength to his character.

Is the recitation free from *distractions*? If thought and interest are to move along in an unbroken train, they must not be interrupted too frequently. The teacher who stops the recitation to answer questions asked by those outside the class, or to correct disorder, is himself a source of distraction, and ought to mend his ways. Most of the questions usually asked in the rural school could be saved by better foresight and management, and those that really need to be answered can usually be attended to between classes. The writer saw one teacher in the midst of a reading recitation leave a boy reading a paragraph while she went back in the room to help another pupil solve a problem in arithmetic. The reader mumbled his paragraph through, and then the class waited for the teacher to return to the recitation. Such gross mismanagement and incompetency as this teacher manifested would not be tolerated in a business concern, but would surely result in dismissal.

The physical conditions surrounding the recitation are not seldom a source of distraction. The recitation seat

is sometimes near the stove, and the class are subjected to a roasting process. Sometimes the sunlight falls directly on the books, and the eyes are dazzled or pained. The air not infrequently is unfit for breathing, and results in lowered vitality and fagged brains. The minds of the pupils should be at their highest level of efficiency in the recitation, and every possible condition should be arranged to favor this end.

Is the teacher *helpful and responsive* in the recitation? Nothing is more embarrassing to one speaking than to have a dull, bored, or unresponsive listener. The teacher whose face shows no sign of interest or appreciation is, to say the least, not a source of inspiration to his class. Teachers are sometimes critical, faultfinding and cross in the recitation. This attitude is always a mistake, for it has a tendency to embarrass the timid and to make sullen the more bold. A recitation at its best is simply an interesting conversation carried on between teacher and class; and a conversation requires courtesy and responsiveness on both sides. The teacher must learn to be firm, insistent and thorough without becoming severe or over-critical. His attitude should always be one of helpfulness and cooperation rather than one of attempting to corner or trap.

Is the *assignment* of the next lesson properly made? Or does the teacher simply say, "Take the next chapter; **Good teaching requires careful assignment** the class is excused"? Every lesson should be clearly and definitely assigned, so that every member of the class knows exactly what is to be done. The hard points should be given attention, and the more important sec-

tions emphasized. The method of attack on the lesson should be suggested, and help given on the mode of its preparation. That all this will take time is no excuse for neglecting it. A reasonable proportion of the recitation time is better expended in this way than in any other. Any failure properly to assign lessons betrays lack of efficiency in one of the most important phases of the teacher's work.

FOR TEACHERS' DISCUSSION AND STUDY

1. Can you recall one or two of your own teachers who were especially a source of inspiration and help to you? Can you explain the secret of their powers?
2. One writer says that "vicariousness"—the power of putting one's self in another person's place—is the first great attribute of a teacher. If so, why is this true? What are several other fundamental attributes?
3. Are all of the qualities that go to make a good teacher desirable outside the schoolroom?
4. What qualities in particular would you say are most desirable in a teacher? One writer says that a teacher's personality is even more important than his knowledge. Is this statement true? Can the personality be improved?
5. You have known some recitations to drag and others to move with life and interest. What factors are responsible for this difference?
6. How much preparation do you get for your daily recitations? Do you enjoy recitations better when you are well prepared? Do the children respond better? How can you prepare daily if you have twenty-five classes?
7. What is your method in assigning lessons? Do you think it pays to take time for careful assignments? What do you do with children who forget assignments?
8. Have you observed wide variations in the standards

of excellence in the recitations in different schools? Is not all thoroughness relative, and will the teacher not need to take age and development into account? On the other hand, should partial answers and half-mastered truths be allowed to pass uncompleted?

PART IV

CONSOLIDATION AND RURAL-SCHOOL EFFICIENCY

CHAPTER XIV

THE MOVEMENT TOWARD CONSOLIDATION

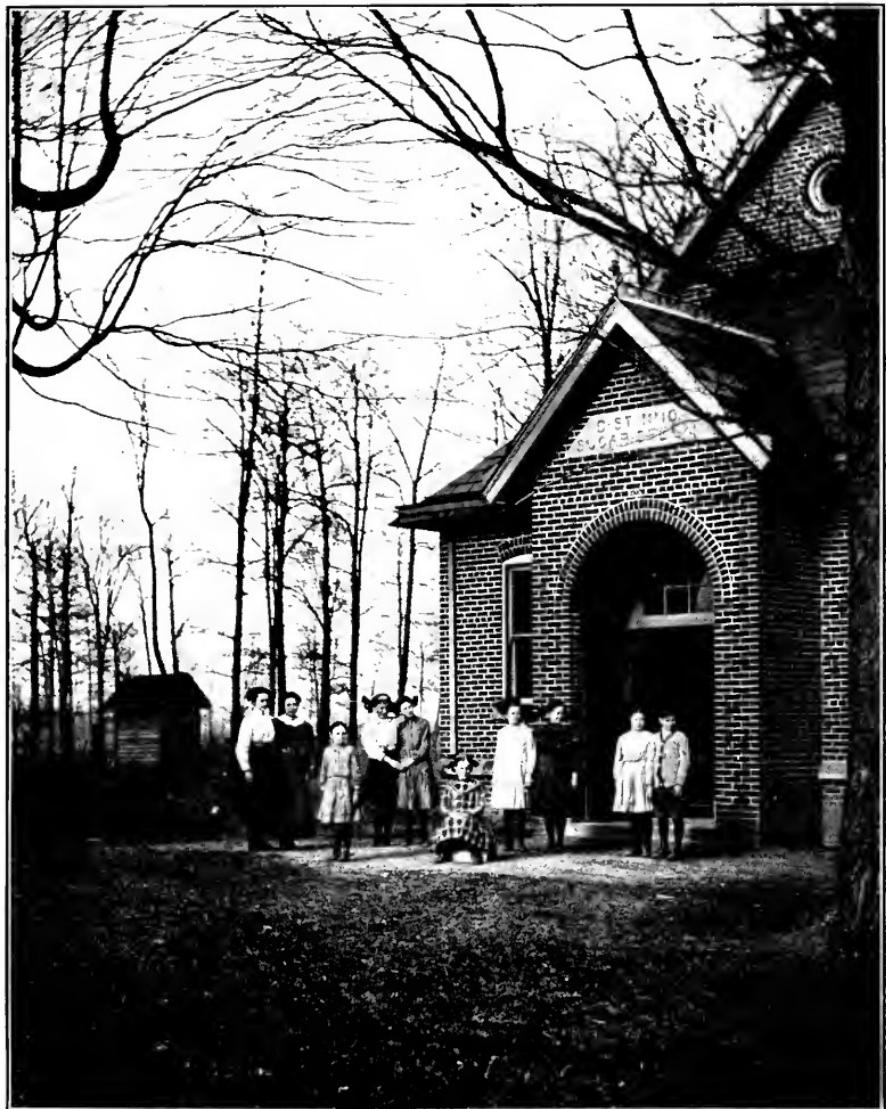
Many different factors are at work for the betterment of the rural schools. Of these none is more vital and **Changes necessitating consolidation** important than the movement toward *consolidation*, or the combining of several small district schools into a single larger one. This movement first arose in New England, where it owed its origin to the dwindling size of the district schools. A generation or two ago it was common for the rural school to enroll thirty or forty pupils, and not infrequently as many as fifty were to be found within its walls. But that day is past. Permanent social and industrial changes have come about, and towns and cities are claiming an increasingly larger proportion of our people. Besides this, not a few of those who live on the farms now send their children to the town school instead of to the little home school. The consequence is that the district school has been losing in numbers, and occasional schools have become extinct from sheer lack of pupils. Thousands of rural schools are to-day running with less than ten pupils, and many with under half that number.

This loss in numbers has produced serious consequences in the rural school, and our people are coming **Loss in efficiency through small schools** to see that the interest, the efficiency and the economy formerly belonging to the larger district school are want-

ing in the small schools of the present. To continue these unprofitable schools is like attempting to carry on our manufactures in thousands of primitive and poorly-equipped shops, each employing but a few workmen, instead of conducting such industries in well-equipped factories manned with hundreds or thousands of skilled mechanics. Readjustments must be made to meet the changed conditions in education, just as they have been made to meet new conditions in the industries.

Consolidation is no new and untried experiment, as many unacquainted with its history think. Massachusetts **Origin of consolidation** took the first step toward consolidation in the year 1869, and has steadily continued the policy to the present day. The pioneer in the movement was Superintendent William L. Eaton, of Concord. He looked about him in Concord Township, and saw the small and struggling schools, each irregularly attended by little groups of children from the neighboring farms. He concluded that the children would be better off in one larger and stronger school. But the homes were widely scattered, and the distance was too great to walk. There was no law at that time allowing public money to be spent for the transportation of children to school. A new law was sought for this purpose, and the school was opened. At first the new school consisted of only two districts, but others voted to come in, and by the end of ten years all the schools of Concord Township were consolidated.

The movement thus begun soon extended to other New England states, and so on to the Middle West, and **Extent of consolidation** more recently to the South and the far West. Consolidated schools now form an integral part of the school system of fully three-



This building was planned for a school of forty or fifty pupils. The attendance has now dwindled to nine. For two years the boy shown in the picture was the only boy in the school. This is a case where a good district building adequately equipped fails to attract pupils when a consolidated school is within reach

fourths of the states, and are spreading to the remaining ones. This type of school is in successful operation all the way from Maine to Florida, and from Massachusetts to Washington and Oregon. It is therefore not limited to any particular geographical or economic conditions. The plan has proved successful on the plains of Texas, among the hills of Vermont, and on the sparsely-settled prairies of North Dakota.

This is not to say that all district schools are soon to be replaced by consolidated schools, and that the one-room school will henceforth be remembered only as history. Many conditions render this impossible. There are now in the United States something over two hundred thousand one-room country schools, while but a few thousand consolidated schools have been organized.

Yet the importance of the consolidation movement can not be measured by a comparison of these figures.

Hopeful signs For, though the movement began more than forty years ago, it is only within the last decade that it has taken on national importance and gathered irresistible momentum. It is estimated that more schools have been consolidated during the last five years than in all the time preceding since the movement began. There is not a state in the union where consolidation is not now being agitated, and compulsory or favorable legislation is being passed in many of them. As an example of these laws, Indiana requires the automatic closing of all schools that fall below twelve in enrollment, while Minnesota and Iowa have recently passed acts granting state aid to schools that consolidate. The federal Bureau of Education and the Department of Agriculture are both giving much attention and study to the matter of consolidation, and are lending it their powerful

support as a part of rural-school improvement. State departments of education are also taking up the question and urging its acceptance by their people. Besides these activities, county superintendents, patrons and teachers are studying and discussing the matter, and rapidly preparing the way for its more general acceptance.

One of the most striking illustrations of the widespread interest in the success of consolidation is found in the recent visit of a party of educators consisting of eleven southern state superintendents, several state supervisors of rural schools, a representative of the United States Department of Agriculture and a representative of the Southern Education Board, to certain regions where consolidated schools are in operation. These men were sent at the expense of public funds or private benefactions to study the systems of consolidation as they are being worked out in sections of Indiana, Ohio, Canada, Maryland and Virginia. They came to the problem with open minds, ready to see both the advantages and the faults of such a system. Some of them had already been advocating consolidation in their home states, while others were less certain of its success. Their sincere purpose was to learn at first-hand to what extent the consolidated schools, once permanently established, enter into rural community life and become a factor in preparing the youth educationally and vocationally for their work.

These educators visited the schools in their regular daily work. They rode in the school wagons; they talked

Leading educators support the movement with patrons, pupils, teachers and trustees; they investigated the matter of expense, both for running the school and for transportation; they studied the effect on



Southern state superintendents leaving Crawfordsville, Indiana, the starting point of a twelve day tour among the consolidated schools of Indiana, Ohio, Maryland, Virginia and Canada



Courtesy of A. R. Baker (Ala.)

An old log school house with only one window and this without glass

attendance and educational interest. In every possible way these investigators sought to discover the true measure of the efficiency of consolidated schools. As a result of their painstaking study the cause of consolidation has been greatly advanced. For, so fully convinced were these officials of the value and feasibility of consolidation, that they are earnestly advocating its adoption, and have already done much to further the movement in their own and other states. Through their influence and other factors also at work, many parts of the South are now leading the North in rural-school reform and progress.

The movement toward consolidation has at no stage been a fad. Farmers are naturally a highly conservative class, and because of their very isolation, immune from the hasty and irrational spirit of the mob. Consolidation is therefore but gradually being assimilated into the rural-school system. It has been adopted as a result of observation and experiment, and it flourishes best where civic ambition and high educational ideals control. There is no danger of reaction toward the old district type of school; for in no case has a fully consolidated school reverted to the former one-room type. Indeed the greatest of all factors in promoting consolidation is the loyalty and enthusiasm of the patrons of consolidated schools who, as a rule, are abundantly satisfied with the new school, and would not hear of returning to the old.

The present status of consolidation may be estimated from recent statements written or published by the state superintendents of certain of the consolidation states. In Massachusetts the movement has almost ceased to advance, from the

fact that it has proceeded about as far as is at present practicable. This state spent over a third of a million dollars during the year 1911-1912 for the transportation of pupils to consolidated schools. Louisiana has three hundred consolidated schools, accommodating some fifty thousand pupils. Idaho is transporting over five thousand children at public expense, and predicts that within a few years consolidated schools will completely supplant one-room schools. In Washington more than thirty of the forty counties have begun consolidation, and the movement is rapidly growing. Consolidation has proceeded so far in Rhode Island that there are less than two hundred ungraded schools left in the state. Under the new consolidation law, Minnesota built about sixty consolidated schools in the year 1911-1912, and the movement is spreading with great rapidity; sixteen thousand pupils attend consolidated schools in Minnesota. Kansas has nine thousand children attending the consolidated schools, which are constantly growing in favor. Oklahoma finds the consolidation sentiment stimulated by recent legislation granting state aid to consolidated schools, and now has over eight thousand children in these schools. Arkansas has more than one hundred consolidated schools, and many others in project. Ohio has two hundred consolidated schools, accommodating fifteen thousand rural children, and is rapidly extending the consolidated system. Florida reports consolidated schools in thirty-three of the forty-eight counties of the state. Tennessee accommodates some eight thousand pupils in consolidated schools, and is extending the system. Vermont sends one-fifth of her rural children to consolidated schools, and is increasing the proportion. Seven out of Utah's twenty-seven counties have consolidated their

schools, which are attended by an aggregate of more than thirty-one thousand pupils. New Jersey expends about two hundred thousand dollars annually for the transportation of pupils to school. North Carolina is pushing consolidation, and now has about one-fourth of her pupils accommodated in schools of two or more rooms.

This new type of school has absorbed more than twelve hundred of North Carolina's one-room schools during the last ten years. It is, however, in the state of Indiana that the greatest progress has been made in recent years, and that we find the nearest approach to a state system of consolidated schools. Eighty-two out of the ninety-two counties of the state now have consolidated schools in operation, and approximately half a million dollars a year is being paid for the transportation of pupils to consolidated schools. Many of these consolidated schools have a full four-year high-school course, and as full equipment as a city school. Montgomery County, in this state, is, according to the report of the United States Commissioner of Education, the banner county for the proportion of its rural pupils attending consolidated schools, the percentage being eighty-four for consolidated schools and sixteen for one-room schools.

Still other statements could be presented showing similar conditions in many of the remaining states. Enough has been said, however, to prove that consolidation has passed the experimental stage. It is no longer a question of *whether* the one-room schools yet remaining in many parts of the country shall be abandoned, and consolidated schools erected in their stead; the question is rather *how* this is best to be brought about, and what should be the type of the new school.

The rapidity of the movement toward consolidation is

affected by the methods adopted for the change from one system to the other. The earliest laws in New England required that each one of the districts affected by consolidation should vote separately on the question, and that no district should be forced to abandon its school against its will. This plan was natural and right enough while the movement was still an experiment. But it is at best but a slow process, for, voting by single districts, a few objectors can often defeat the whole project. The later method, first adopted by the Ohio voters, is for the entire area to be included in the consolidated district to vote as a unit. Thus, under this method, if it is proposed to form a new district by consolidating five small districts, the voters from all the districts assemble and vote in the one election, a majority carrying the project for all districts concerned. This method is undoubtedly the better one, and the plan that should be followed in all new legislation on the subject.

Three different legislative methods have been chiefly employed to provide for the extension of the system of consolidation: (1) *Permissive legislation*, which merely provides that school districts or townships may if they wish consolidate their schools and provide transportation at public expense. Such were the earlier laws in all the pioneer states, and the type that is still common in most of the states. We have, therefore, no complete state system of consolidation. The movement is strictly one of local or district option. (2) *Compulsory legislation*, requiring that all schools which fall below a certain minimum shall be closed, and the pupils trans-

Methods of changing to consolidated system

England required that each one of the districts affected by consolidation should vote separately on the

ported to neighboring schools at public expense. It is hardly probable that this type of legislation will become popular, though it is entirely rational wherever the conditions are such that transportation of the pupils belonging to the abandoned school is possible. Indiana has taken the lead in compulsory legislation, requiring the discontinuance of all schools having a daily average attendance of twelve or less, and leaving it optional with the township trustee to close schools with an average daily attendance of fifteen or less. Several other states have similar laws, but usually with such exemption clauses as to render the law practically inoperative. (3) *State aid* to consolidated schools on condition that certain requirements are met. This principle has long been in operation in varying forms in different states. Minnesota, however, furnishes the best recent example of the use of state aid to encourage consolidation. Under the Minnesota law, each consolidated school having two rooms and two teachers receives annually from the state treasury the sum of seven hundred and fifty dollars. Similarly, a three-teacher school receives one thousand dollars, and one having four or more teachers, fifteen hundred dollars. In addition, the state encourages the erection of good school buildings by providing aid up to a possible maximum of fifteen hundred dollars for building purposes for any one school, on condition that certain building requirements are met. The effects of this financial encouragement can hardly be overestimated in stimulating the local communities, first, to consolidate their schools, and second, to erect good buildings with adequate equipment. The first year under this law saw fifty consolidations effected in Minnesota, as against nine

for the eleven years preceding the adoption of the law. Iowa has more recently passed a similar law, and its effects are already being felt.

It should be recognized in speaking of consolidated schools that no uniformity exists at present as to the precise type of schools to which this term shall apply. In many regions of the country, particularly in the South, where the vote on consolidation is taken by separate districts, the first step toward consolidation is the union of but two adjacent schools, with no extension of the curriculum and no great improvement in the grading. Such schools are sometimes referred to as consolidated schools, but are more correctly described as union schools.

George W. Knorr, who has made an excellent and extensive study of consolidated schools for the federal Department of Agriculture thus distinguishes between consolidated and union schools: "A consolidated school is one combining three or more one or two-room district schools. It is usually located at a logical and conveniently accessible center within a territory of between ten and forty square miles, and provides free public conveyance of all pupils who live beyond a reasonable walking distance from the school. A union school combines two small district schools of one or two rooms into one."¹ It is probable that the distinction here made does not sharply enough bring out the difference in *standards* of the two types of schools. The union school is often set up as a measure of sheer economy; the consolidated school always seeks greater efficiency.

Consolidation has already gone far enough to prove

¹ *Southern Education Board of Publication Number six, page eleven.*

that it is practicable over a far wider range of country than was at first supposed. The two most unconquerable foes are sparsely-settled areas and bad roads, the latter resulting from mud, snow, or many very steep hills. Difficult as these two factors make the problem, however, they are less discouraging than the indifference and conservatism still prevailing in many places where all other conditions are favorable. Some of the most successful attempts at consolidation are being made in thinly-settled regions of North Dakota and in Idaho, where both distance and the roads are a handicap. In Vermont, also, where the topography makes transportation difficult, consolidation has proceeded at an encouraging rate. The chief element in the success of the movement is, after all, an awakened public interest in education, and full information as to what consolidated schools are actually accomplishing for the communities where they are fully established.

On the other hand, nothing is further from the truth than the supposition that consolidation will remedy all the shortcomings of rural education. There is no magic in the consolidated school. Consolidation only supplies the conditions under which efficiency in education may be achieved. It allows a broader and richer curriculum, better buildings and equipments, better teaching, and a wider and more helpful range of associations than are possible in the district school. Unless these things are supplied, there is little virtue in the mere fact of consolidation. But they are being supplied in the consolidated schools already organized, and it is the demand for them that insures the further spread of the consolidated system.

It is true that the one-room school must not be for-

gotten or neglected. For many rural children will for years receive all their education in the district type of One-room schools rural schools, and every effort should not to be neglected be made to raise their standards of efficiency where it is impracticable to transform them into consolidated schools. The district school will, however, soon cease to stand as the type of rural education in this country. Careful estimates lead to the conclusion that from four to five million of the six million country children will within the next generation obtain their education in well-equipped consolidated schools, instead of in the old type of district school. It is safe to say that *the movement toward consolidation of rural schools is the most important national movement now under way in country-life education.* It will therefore be our purpose to look a little more closely into the nature of the consolidated school and its relation to better rural education.

FOR TEACHERS' DISCUSSION AND STUDY

1. What is the smallest district school in your township? What is the average monthly cost per pupil in this school? Compare this with the cost in town or city schools.
2. What do you consider the chief obstacles to consolidation in your community? How may these obstacles be overcome?
3. What arguments would you use to convince an opponent of consolidation, that it is (1) not a mere fad, (2) that the cost is not prohibitive, (3) that transportation is not impossible under average conditions?
4. What is the law on consolidation in your state? Does it need revision? If so, in what direction?
5. What effect do you think consolidation will have

on the status of teachers, (1) in the number of available positions, (2) in requirements, (3) in salaries, (4) in conditions under which to work?

6. Are you willing to help accomplish consolidation in your county? If so, are you willing to study the question sufficiently so that you can speak with authority on it?

CHAPTER XV

THE CONSOLIDATED RURAL SCHOOL

There are in the United States at the present time three distinct types of rural schools. These are, in the order of their development, the *district school* the *union school* and the *consolidated school*, and may be defined as follows:

A district school is an ungraded one-teacher school usually within walking distance of all the families in the territory it serves.

A union school is two or more district schools united in one enlarged district or semi-graded school.

A consolidated school is two or more district or union schools combined in one large graded school, conveniently located, and to which pupils from the outlying districts are transported, usually at public expense.

The difference between the consolidated and union schools is more vital and real than apparent. These two types of schools have not always been distinguished from each other, and union schools are not infrequently called consolidated schools. This confusion is due to the failure to bear in mind that the term "consolidation" as applied to rural schools has acquired the right to bar from its classification all schools which are not satisfactorily graded, whose buildings and equipment are inadequate and out-of-date, and to which pupils living at a distance are not transported.

District schools, as already shown, had their origin at a time when life was simple, families large, roads new and poor, and when education beyond the simplest rudiments was looked on more as a luxury than a necessity. They were created to meet an immediate and pressing need, and inestimable good they have rendered. For two hundred years they have been for rural America the most important social institution after the home and the church.

Union schools are probably as a rule inferior to the average district school. This is because of overcrowded conditions and intensified disadvantages, with almost no added advantages. A recent investigation of union schools in eight states brought out the following facts: Of the two-teacher union schools, approximately sixty-five per cent. had both teachers in one room, which in certain instances was converted into two rooms by means of curtains or some other form of improvised partitions. Sixty per cent. of all the union schools covered by this investigation were using one of the old district buildings which in only a few instances had been enlarged or altered. Fewer than ten per cent. were offering transportation of any kind. This investigation confirms the conviction that union schools are in the main mere makeshifts, often instituted to save expense, with no thought of improving conditions.

However well they may have served the past, district and union schools do not meet the needs or measure up to the standards of the present. Weighed in the balances of comfort, educational efficiency and hygienic requirements, these schools are found wanting, and must give way to a type of school patterned after twentieth century standards.

That consolidation seems the best and most desirable type of rural school has been proved beyond all reasonable doubt. Professor Eugene Davenport, who has made an exhaustive investigation of the success and operation of rural-school consolidation, says: "No case is on record in which the change has been made back again from consolidation to the small school. . . . The most searching inquiry has failed to discover any disadvantages worthy of mention."

Before consolidation had passed through the stage of experimentation, Honorable William T. Harris, then United States Commissioner of Education, wrote: "Upon the success of Consolidation rests the chief hope for the improvement of the rural school. It is fortunate that a device which changes the ungraded school into a graded school involves a saving of expense. The improvement is well worth the trial, even were it to double the cost of the rural school; but, as will be seen by statistics, it is secured with an actual saving of expenditure. Better teachers, more sanitary buildings, less personal expense on the part of the pupils, better classification and many lesser advantages are commanding this reform over the country."

President E. T. Fairchild, of the New Hampshire College of Agriculture and Mechanic Arts, says: "Would it not pay as an investment to bring the school up to the same high standard of efficiency that is being enjoyed by the modern up-to-date farm? . . . The old-time country school, as many of us remember it, has gone, never to return. The large attendance, the male teacher in the winter, the pupils ranging in age from six to twenty-one are no longer in evidence. Consolidation is the only



Consolidated school at Twin Falls, Idaho. The building and the school hacks are typical of the consolidated school in the Far West

way of securing really good country schools, and it is the only solution of the problem of agricultural education."

One of the first and most obvious advantages of consolidation is that *it supplies the necessary conditions for Consolidation allows grading a graded school.* The district school can never be graded accurately where there is but one teacher for all eight grades. In thousands of one-room schools the work is a mere jumble, with no regular order of procedure in passing from one subject to another, and no plan or guide as to the correlation of studies or the amount of time to be spent on them. The woeful loss of time under such conditions is too obvious to require discussion.

Nor with the great variety of subjects now demanded in the curriculum, can any teacher be well prepared to teach them all. This is the age of specialists, and no rural teacher should be expected to teach more than two, or at the most, three grades. Not only is the amount of preparation required too great to admit of one person handling the subject-matter of all eight grades, but the difference in the ages of the pupils demands different methods of instruction and leadership. In other words, children representing all ages from six to fifteen years and requiring a wide differentiation in the subjects taught them, should have teachers specially prepared for certain ages or grades.

The consolidated school makes possible a system of grading similar to that employed in urban schools. The *Grading provides goal for pupils* pupils can then have a regular sequence of studies assigned; they can pass through the subjects at a rate standardized through the experience of many schools; and they can work to-

ward the definite goal of completing a specified requirement for graduation from the elementary school or admission into the high school. The teacher, relieved of the necessity of covering the whole range of elementary subjects, can now specialize on one or two grades of the work and develop a high degree of efficiency. Or, he may specialize in some one or two subjects, and teach these in several grades, thus carrying out the plan of departmental teaching now adopted in many elementary schools in towns and cities.

The consolidated school also has an important bearing upon the size of the classes. Few will question the **The waste in very small classes** statement that it is easier and more stimulating to teach a comparatively large class than a very small one. In the average district school it is no uncommon thing to find class after class numbering three, two, and even one, pupil. Now, it requires practically as much time and effort on the part of a teacher to make preparation for a class numbering one or two pupils as for a class of twelve or fifteen. And it is far less difficult to create and maintain interest in a larger class than in a very small one. By gathering all the pupils from five, six or more old district schools into a consolidated school, each class is sure to be sufficiently large to stimulate both teacher and pupils.

More important still is the amount of time allotted to each class. The average number of recitations per day **Better distribution of teaching time** in district schools is approximately double the average number in graded schools. This means that the teacher in a graded school can give twice as much time to each recitation or class as the teacher in the district school. A study of the schools of one county where there are nearly an equal number of

teachers in graded and ungraded schools showed that the average number of recitations per day in the district schools was twenty-seven, as against eleven in the consolidated schools. The average number of minutes given to each recitation was thirteen in the district schools, as against twenty-nine in the consolidated schools. Now it is wholly evident that no teacher can do justice to himself or his school if he has twenty-seven classes a day, and an average of only thirteen minutes for each recitation.

Consolidation is the only rational outcome of the demand for an *extension of the rural-school curriculum*.

Consolidation allows extension of curriculum The public is asking for a course of study that shall not only include the old fundamentals, but also add the practical newer branches relating to the immediate life and work of the pupils. This can never be accomplished successfully in the district school with its many grades under one already overworked teacher. It requires the consolidated school, with its division into grades, and some opportunity for specialization on the part of the teachers.

Better buildings and equipment *The consolidated school is the chief agent for securing new and necessary buildings and equipment.* For one whose school-days were spent in a district school to visit a modern city school and pass from room to room including assembly room, library, laboratories, playrooms, gymnasium, lavatories, manual-training shops, kitchen and sewing-room is enough to cause him to feel that society has immeasurably and irreparably defrauded him. Country boys and girls have as much need for these things as a part of their school facilities as city children. But they are possible

only in the consolidated school. Nor can the matter be put aside by calling attention to the many compensating advantages enjoyed by country children. Many of the very people who talk and write most enthusiastically about the advantages of country life would greatly hesitate to place their own children in a one-teacher country school. The one man who said and did most to hinder consolidation in a certain western county, moved to the county seat for the express purpose of giving his children better school advantages than were offered by the district school near his farm home.

The cry for better buildings and equipment involves vastly more than mere pride and a growing desire to effect visible improvement. Both are necessary in order to make it possible for country people to participate in the "new education." The more practical and helpful subjects recently added to the curriculum can not be taught effectively within the walls of the country school-house. These branches of study require not only additional room but special equipment. Where in the ordinary district school building is there room for a laboratory, a workshop, a domestic-science department, or a kitchen? But perhaps of even more importance than these is the matter of sanitation and the health of body and soul. It can not be denied that the average district school falls short in the matter of hygienic and moral safeguards. With rare exceptions district schools have very limited and undesirable accommodations in the seating, the lighting, the ventilation and the lavatory equipment which they possess. Consolidated schools are being built that are beyond criticism on these points.

Consolidated schools demand better teachers Consolidation has proved desirable because *it has secured better teachers and closer supervision.* Before the establishment of modern high schools in every city and town, with their call for an increasing number of high-class teachers, district schools offered the only field of service to a majority of the young men and women entering the teaching profession. And it is well agreed that many of the best teachers remained permanently in the country schools. But in these days when there are so few effective inducements to lead promising young people into teaching, and when the city schools are the goal of almost every aspiring teacher, it is next to impossible to find competent teachers for the one-room country schools.

The handicap of district schools To be sure there are many marked successes among the beginning teachers in district schools, but the very fact that these young teachers have done excellent work in spite of severe handicap is sufficient ground for calling them to larger schools. The superintendents and school boards of many town and city schools ask for no better field from which to select new teachers than from the beginning teachers who have made good in rural schools. One or two years' experience in these schools seems to be regarded as peculiarly good preparation for a position in a town or city school. In a certain county in the Middle West, there were during one school year two hundred and thirty-four teachers, thirty-eight of whom were teaching their first term: of these thirty-eight first-year teachers, thirty-six were in district schools. And more interesting still, there were only forty-four district schools in the county at

that time. In other words, there were just eight district teachers in the county who had had experience. And of these thirty-six beginning teachers only seven returned to the district schools the following year. The remaining twenty-nine have either dropped out of the profession, or were promoted to larger schools.

A recent investigation covering thirty-six counties in twelve representative states showed that a majority of district schools changed teachers every year. That this is one cause of the decline in the character of district schools none will deny. And should one charge this fault up to teachers in these schools? Who can blame an ambitious young teacher for accepting a tempting offer to take a position in a city, town or consolidated school? District schools require more work and more responsibility, entail more hardships, and offer considerably less remuneration than the more desirable schools.

By closer supervision we mean the presence and services of the superintendent or principal, who is at the head of every consolidated school. The very fact that the daily work of a teacher falls under the scrutiny of an experienced leader or superintendent is enough to call forth maximum effort. There can be no such supervision over district teachers. An annual or semi-annual visit from the county superintendent may help a little, but in the words of an experienced district teacher, "When the superintendent is most needed, he can not be had; and when he is least wanted he is likely to appear." Consolidation meets this need by providing each school and each teacher with a competent and accessible superintendent.

Consolidation has proved its superiority over the other two types of rural schools by *keeping a larger percentage of the older children in school.*

Consolidated schools keep pupils longer Thoughtful persons everywhere are coming to realize that one of the gravest problems connected with the education of our youth is the question of preventing so many boys and girls from dropping out of school with but the smattering of an education. How the consolidated school affects attendance is typified by a new school in Lauderdale County, Tennessee, where a consolidated school now has twice the enrollment of all the district schools it displaced.

A comparative study of the number of children between fourteen and eighteen who are out of school in localities served respectively by consolidated and district schools has shown that consolidation succeeds in holding nearly twice as many pupils of these ages. Whether this is due to the high-school advantages offered by the average consolidated school, or to the more attractive buildings, grounds and associations is neither here nor there in the discussion. The plain fact is that consolidated schools are keeping hundreds of boys and girls in school who otherwise would have dropped out. Reports from county superintendents in states where consolidation is in operation show that it is a common thing to find as many boys and girls above fourteen years of age out of school in a single district served by the old type of school as in the entire area served by a consolidated school. And what makes this weakness on the part of the district schools a still more serious matter is the fact that approximately eighty per cent. of these

boys and girls who are out of school have never completed the elementary course.

Greater economy has been urged as an outstanding advantage of consolidation. Some of the most influential friends and promoters of consolidation have held that a consolidated school can be operated more cheaply than the aggregate cost of the district schools supplanted by the consolidated school. For example Doctor W. T. Harris, whom we have quoted on an earlier page, uses these words: "It is fortunate that a device which changes the ungraded school into a graded school involves a saving of expense." Other officials have issued bulletins and pamphlets purporting to show that consolidation means an actual saving to taxpayers. We shall not attempt to prove that consolidation reduces the amount of money needed for school purposes in communities adopting this type of school. But it is beyond question that a given amount of money spent in establishing or maintaining consolidated schools will purchase much more genuine and lasting advantage than an equal amount spent in establishing or maintaining district schools. It is further true that the *same amount* of schooling, day for day, can usually be had for at least as little in the consolidated as in the one-room school. The following table allows an interesting comparison to be made between the two types of schools.

The comparative cost of consolidated and district schools as shown by reports from the county superintendents representing the states of Alabama, West Virginia, Ohio, Indiana, Minnesota, Illinois, Idaho and Washington is shown. These superintendents were asked to give the *average cost*

A comparison of relative cost

of the best district and the best consolidated school in their respective counties. All of the consolidated schools reported maintain a high-school department.

A COMPARISON OF THE COST OF BUILDINGS AND EQUIPMENT

	Av. Cost of Best Con- solidated School	Av. Cost of Best Dis- trict School
Building and grounds.....	\$18,000	\$3,000
Equipment	3,000	500
Heating system and plumbing.....	3,500	180
Library, maps, charts and pictures.....	500	70
Total amount invested.....	25,000	3,750
Interest on amount invested at six per cent.	1,500	225

A COMPARISON OF ANNUAL EXPENDITURES

Teaching	\$3,040	\$360
Supervision	500	20
Transportation	1,500	...
Janitor service	200	30
Fuel	160	45
Library	100	5
Transfers from one district to an other .....	...	90
Insurance	25	5
Repairs	50	20
Miscellaneous	100	30
Interest on initial cost.....	1,500	225
Total annual cost.....	7,175	930
Number of pupils enrolled.....	139	21
Per capita cost.....	51	44

It is thus seen that the modern one-room building is costing an average of \$3,000, and the consolidated building six times as much; and that the average total amount invested in the consolidated school is \$25,000, and in the district school,

Summary of results

\$3,750. The teachers in the best one-room schools are averaging \$360 a year, while the teachers' budget for the average consolidated school amounts to \$3,040, more than eight times as much, though there are seldom more than six or seven teachers in the consolidated school, and frequently less than six. The greatest increase is in the cost of supervision, the consolidated averaging twenty-five times as much for this item as the district school. Another excellent indication is seen in the fact that the average consolidated school spends twenty times as much for library purposes annually as the district school, though the consolidated school combines only from four to six district schools. The average number of pupils enrolled in the best one-room schools is twenty-one, while the average number for the best consolidated schools is one hundred and thirty-nine. The annual cost per pupil is greater for the best consolidated than for the best one-room schools, the former being fifty-one dollars, and the latter forty-four dollars. When the fact is taken into account, however, that the attendance in the consolidated school is much more regular than in the district school, and that the school year is also longer, it is found that the cost per day of actual schooling is usually not greater in the consolidated than in the one-room school. Frequently it is considerably less.

But educational advantages and social opportunities can not be measured in terms of dollars and cents alone; **Cost not the true measure** this is important, but not all. The strongest claims for the consolidated school *are not based on the question of economy*. They are based on the belief that our people are ready for, and are demanding: (1) better accommodations, (2) higher

educational efficiency, and (3) an enriched country life. When the consolidated school fails to excel the district or union school in these advantages, it fails to live up to the real purpose for which it was created.

The difference between the consolidated and the district schools as to the distribution of the teacher's time is shown in the following table representing the two types of schools in Montgomery County, Indiana, where eighty-four per cent. of the rural children are in consolidated schools and sixteen per cent. in one-room schools:

	Consolidated	District
Average number of grades per teacher	2.7	6.4
Percentage of teacher's time per grade	37	15
Number of recitations per day....	11	27
Minutes for each recitation.....	29	13
Minutes for each grade taught... .	117	56

It is seen from these figures that the teacher of the one-room school handles nearly two and one-half times the number of grades cared for by the teacher in the consolidated school. He also hears almost two and one-half times as many recitations daily, and therefore has less than one-half as much time for each recitation. Each grade in the consolidated school receives more than twice as much of the teacher's time as a grade in the district school. When it is also taken into account that the consolidated schools run from nine o'clock to four, and the district schools from eight-thirty to four in this county, the discrepancy becomes still greater.

In order to test the attitude of patrons toward the con-

solidated school an inquiry was recently instituted in which the following were among the questions asked: (1)

**Response of
patrons to advan-
tages of con-
solidation**

What do you consider to be some of the greatest advantages of the consolidated schools? (2) What are some of the greatest weaknesses of this

type of school? (3) Would you be willing to return to the old district school if you were assured that your teacher would be equally as competent as the present teachers in your consolidated school?

In reply to the first question the following represent the type of answers given by these patrons: The consolidated school provides better building and equipment. It results in better teachers. Better discipline is maintained. The consolidated school saves washing and patching of clothes. It makes it unnecessary for parents to force or drive their children to attend school. There is less of sickness and bad colds. It puts the children in larger classes. The consolidated school enables our children to have more practical and useful matter taught them.

In reply to the second question, typical criticisms were: The school is trying to do too much work. The lesson assignments are too long. The children are too long in the wagons. The wagons are not always comfortable. The wagon driver drives too slowly. The teachers are too strict. It is to be noted that the only criticisms that could not equally well be lodged against any other type of school are those dealing with the matter of transportation. And it is frankly to be acknowledged that the transportation system as organized in many places is susceptible of radical improvement. Suggestions as to certain lines of im-

Valid criticisms

provement in the wagon service will be made in another chapter.

The most striking result from the inquiry, however, was in response to the third question. Not one of all the **Universal loyalty** many patrons interrogated would think of returning to the district school. While certain details of the consolidated school were freely criticized, this type of school was unanimously accepted as the most promising solution of the problem of rural education. The simple chance to compare the advantages offered by the consolidated school with those offered by the district school was enough to convert all the original objectors and opponents, and unite the neighborhood in the common aim of securing better rural schools through consolidation.

FOR TEACHERS' DISCUSSION AND STUDY

1. Can you relate the three types of rural schools to stages of social or economic development? What is the fundamental difference between district and union schools? What is the fundamental difference between union and consolidated schools? If some patron should ask you what constitutes a consolidated school, how would you answer?

2. What reasons explain the decline of the district schools? For what purpose are most of the union schools established? Why are so many of them inferior to the district schools?

3. Has consolidation begun in your community? If so, when did it start? Explain in detail its success and growth. See if you can find where a good consolidated school has ever been abandoned and the district school

reestablished. Write your state superintendent and ask if he has any record of a case of this kind.

4. How fully do you agree with what the late William T. Harris said about the consolidated school? With the other prominent educators who are quoted in this chapter? What do you understand by President Fairchild's statement that "the old-time country school has gone never to return"? Do you think this is true?

5. What is the first great advantage of consolidation? Explain what is meant by the terms "graded school," and "ungraded school." Discuss some of the advantages the graded school has over the ungraded school. Can you think of any advantage that the ungraded school has to offer over the graded school?

6. Would you prefer a class of ten, or a class of twenty pupils; of one, or five pupils? Do you think district teachers can have time properly to care for so many classes? What was the greatest number of classes you ever had? Do you feel that you did justice to yourself and your pupils with this number? How many minutes do you now have for each recitation? Is it enough time? How many classes do you now have? Do you have time to make thorough daily preparation for all the classes?

7. How many times a day do you hear your primary pupils? Compare a district teacher's daily program with a consolidated teacher's daily program. How do you arrange so as to be able to give the proper time to the subjects of agriculture and domestic science? Criticize your own daily program. Do you try to outline your work for the larger pupils? Try to find out how many of the best teachers you know depend wholly on the question and answer method. How often do you give written recitations? Do you find time to grade these papers carefully?

8. Why do consolidated schools keep more of the older children in school? Give reasons for the decline

of social advantages in the country. Name three ways in which consolidation may contribute to the social life of a community. Make comparisons of the cost of the three types of rural school.

CHAPTER XVI

THE CONSOLIDATED SCHOOL AND THE COMMUNITY

The rural community suffers from no greater danger than that of social monotony and stagnation. The nature of the work both in home and in field, the insistent and pressing toil during the greater part of the year, and the isolation of the farm all tend to an unvarying sameness of life and experience.

While solitude has its advantages, and while every person should have an opportunity to be alone with himself some portion of the time, yet danger from social stagnation change, variety and a certain degree of excitement are also necessary. For unrelieved routine finally deadens and cripples. The mind needs the stimulus of change, the shock of contact with other minds, the invigorating influence that comes from new objects of thought and association with other people. Lacking these, there is an inevitable tendency on the one hand to settle into an attitude of indifference and indolence—the ruts of “fogyism”; or, on the other hand, to become dissatisfied and morose, impatient of one’s surroundings, and rebellious against the fate that binds one to such conditions.

The rural community as it exists at present offers few opportunities for social mingling in general neighborhood Little meeting in groups. Going to spend the day in social groups family visiting has declined. The old-

time spelling schools, the debating societies and the singing schools are no longer a part of the activities of the district school. The country church, the common meeting-place for the community, has fallen largely into disuse. Even the telephone, the rural mail delivery and the parcel post, civilizing agencies as they are, have made possible still further isolation; for they run the errands for the family, who are thus enabled to cling still more closely to the work of the farm. The country people do not meet one another face to face, discuss matters of mutual interest, laugh, talk and enjoy a good time together as people need to do. Their lives have a tendency to become very serious, their mental horizon to narrow down, and their outlook on the world of values to become distorted. The country needs some central, organizing, vivifying force to unite members of the community in common interests, friendships and social activities. Something is required to create and maintain a community spirit, a mutual feeling of pride in neighborhood welfare and progress, and to entice away from the humdrum care and toil to the restoring influence of fun and jollity.

Particularly is the rural community lacking in social opportunities for young people. The social impulses, the

Social opportunities lacking for young people desire for comradeship, recreation, fun and amusement, are as deep-seated and insistent in country boys and girls as in those who live in towns. Nor can these natural forces of human nature be any more safely ignored or repressed in the one case than in the other. Expression, and not repression, is the law of development; and where this law is disobeyed, whether in city or in country, rebellion and disaster are sure to follow.

The city is a constant lure to young people, promising

them what it can but in a small measure fulfil. Seen at a distance, and through the eyes of the magazine or novel writer, the city possesses many attractions that are lacking in the country. Even the very dangers and pitfalls, so frequently pictured in lurid colors in the press or on the platform, often constitute a dare and a challenge to youth. For the adolescent demands adventure; he craves an opportunity to try his powers; he longs for variety and excitement, and will not be satisfied with the uneventful round of experience that constitutes the placid daily life of his parents. Nor are such impulses to be deprecated and frowned on; for they constitute the foundation for later achievement.

Failure to recognize these fundamental impulses in rural young people and to provide for their expression is one of the most fruitful causes for the dissatisfaction of our boys and girls with the life of the farm. They are impatient of its limitations, and resentful of its monotony and sameness. Hence they turn their backs on the career that lies nearest to them, the one they would most naturally be expected to choose, and seek occupations in the town or city, where there is already far too large a proportion of our population. Nor would there be justice in keeping boys and girls on the farm without an opportunity to develop the social side of their natures, even were it possible to do so; for this is as much a part of education as the training of the intellect.

The want of social opportunity for young people in the country districts is also accompanied by grave moral

Moral dangers growing out of social stagnation dangers. Young people *will* seek one another's society; it is natural and right that they should. Boys have a

natural tendency to form in "gangs" and clubs. If these organizations are given a right trend, they constitute an important educational influence; but if they lead in the wrong direction, they train the hoodlum and the criminal.

The young men and maidens are likewise found in one another's company, as it is also natural and right ^{Lapses due to lack of social meeting places} they should be. But the lack of social meeting places, the absence of opportunities for recreation and entertainment such as are available on every hand in the city, renders the association of country boys and girls unnatural and fraught with possibilities of danger. Instead of being together in social groups and hence under the control of the social conventions, as is largely the case in the city, the rural young people are thrown together in isolated pairs for buggy rides, or rambles along unlighted roads. At the same time there is nothing objective to demand their attention from themselves and each other at the very stage of development when the impulses most need the check of dominating objective interests and activities.

The result of this poverty of social opportunity is that, "The country districts, which ought to be of all places the freest from temptation and perils to the morals of our young people, are really more dangerous than the cities. The sequel is found in the fact that a larger proportion of country girls than of city girls go astray. Nor is the rural community more successful in the morals of its boys than its girls. In other words, the lack of opportunities for free and normal social experience, the consequent ignorance of social conventions, and the absence of healthful amusement and recreation, make the rural com-

munity a most unsafe place in which to bring up a family."¹

The school is the most natural and effective solution of the rural need for a neighborhood center. The school belongs to the whole people, and can easily be made to serve the social as well as the intellectual requirements of its constituency. Instead of ministering to a very small proportion of the population a few hours each day, twenty days in the month for a little more than half the year, it should be of service to *all* the people of its community whenever it can serve their needs. With adequate buildings planned with such uses in mind, the young people will find at the school a place for their entertainments and parties; here the older ones of the neighborhood will come for their special programs on scientific agriculture and home economy; here all will assemble for neighborhood picnics, lectures, concerts and whatever else goes to add to the intellectual and social life of the community.

But it is to the consolidated school that we must chiefly look for such service. The one-room district school can hardly hope to minister successfully in this way to the social and intellectual demands of the entire community. Indeed the community itself which is tributary to the district school is too small to carry on well such activities as are required in making the school a social center. The consolidated school, however, serving from twenty-five to thirty square miles of territory, embraces a large enough population to make possible a real neighborhood organization.

¹ Betts, *New Ideals in Rural Schools*, page twenty-eight.



The Indiana State Champion Basket Ball Team for the school year 1912-1913. Wingate Consolidated School, Montgomery County, Indiana



Rural high school orchestra

The best proof that the consolidated school can be made a true social center for its territory, is the success that has already attended efforts made in this direction in various parts of the country. It has been found that the commodious assembly room of the centralized school naturally suggests and leads to lecture and entertainment courses; that the large and ample grounds are the logical places for picnics, agricultural exhibits, and stock or grain judging contests; that the well equipped athletic grounds result in the organization of neighborhood teams for outdoor sports, and in field days for the witnessing of athletic contests.

In neighborhoods where the school has been put to such uses, it is not necessary for the boys and girls to drive to some adjacent town to see ball games, or enjoy literary or musical entertainments. For these things can now be had in the home community, and better still, the boys and girls themselves are active participants instead of idle spectators, and hence a thousand times more interested in the occasion. Parents who were worried at seeing their boys start from the farm home for the streets of the near-by town on Saturday nights or Sunday afternoons, look with approval and satisfaction on their departure for some clean and wholesome entertainment at the school center. For here there are no pool rooms, saloons or other dens of corruption.

The ready response of the people of the rural communities to the school as a recreation center has been well typified in Winnebago County, Illinois, where Superintendent O. J. Kern has organized a series of play festivals held on the school athletic grounds. These gala days are attended by hundreds of people from the near-by communities, who bring

**Ready response
of the people**

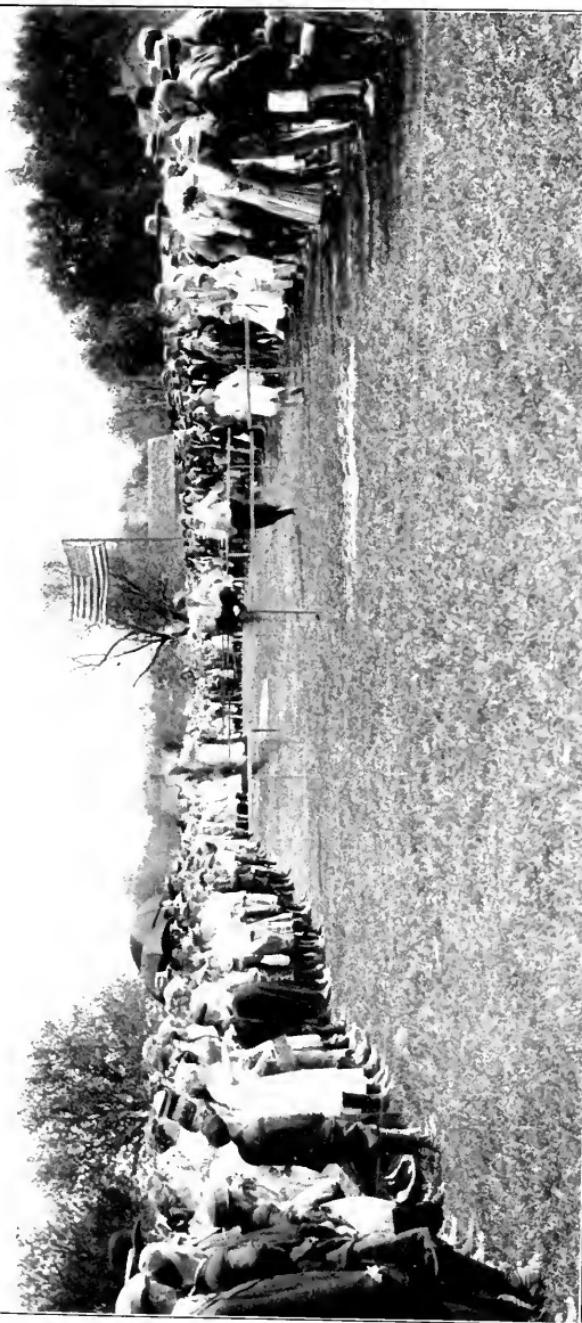
their picnic dinners and give the entire day to fun, frolic and a general good time.

The program recently carried out at the festival held at the Harlem consolidated school is typical of all. The **Illinois play-festivals** hour fixed for assembly was nine-thirty, and by that time the roadside was lined with buggies and automobiles from miles around. The program opened with *The Star-Spangled Banner* played by the school band. Then came the march to the playgrounds, and the exercises of hoisting the flag over the grounds. The entire audience sang the state song and gave the salute to the flag. Next was the tug of war between boys of the competing townships, who fought valiantly for the honor of their teams. This was followed by an hour of games, for which the children were divided into groups in accordance with age, and led by their teachers, who entered as fully into the spirit of the occasion as the children themselves.

Three deep, dodge ball, hill dill, and bean bag throwing occupied the smaller children. Girls from nine to **Play-day games** twelve played long ball, and sheep and athletic events fold; they wound the May-pole, held a fag relay race, and competed in basket-ball throwing. Boys of the same age ran in a hoop-race, and a kite-flying contest, a three-legged race, a leap-frog race, and a relay race. Still older children played games suited to their ages. By this time it was noon, and a monster dinner was set under the trees on the school grounds. At one-thirty began the sports of the afternoon, consisting of a field-meet open to all pupils of the rural schools of the district represented. The junior events included a fifty-yard race, high jumping, a one-hundred-and-eighty-yard race, the shot-put, a sixty-yard hurdle race, pole

Courtesy O. J. Kern (Ill.)

A hurdle race by rural school boys of Winnebago County, Illinois, May 18, 1912.



vaulting, broad jumping, the discus throw and a quarter-mile relay race. The senior events, which were limited to high-school boys, consisted of the seventy-five-yard dash, high jumping, a one-hundred-and-forty-yard race, the shot-put, a hurdle race, pole vaulting, broad jumping, discus throwing and a half-mile relay race. Expert officials refereed the contests and kept records of the events. Prizes and trophies were given the winning schools. The spirit of true sportsmanship was encouraged and cultivated.

The memories of such a day are long cherished by both old and young. Care and toil are laid aside, and worries and troubles forgotten; petty feuds and neighborhood quarrels are buried, and a spirit of goodfellowship and friendship engendered; and the community feeling is strengthened, and loyalty to country life developed. The gain to the schools themselves in increased interest and support can not be estimated.

Similarly a certain consolidated school in Indiana is typical of the relations existing between the consolidated schools and their communities in many other regions. This school was opened about one year ago. Before Social center in an Indiana consolidated dated school that time the pupils had been distributed among four smaller districts now constituting the centralized school. Even during the erection of the new consolidated building, the patrons manifested great interest in the school and often came to watch its construction. On the dedication day, the women of the school neighborhood spread dinner for more than three hundred people who came to attend the exercises and learn about the new school.

Immediately following the dedicatory exercises a move-

ment was set on foot for social and literary meetings to be held regularly in the assembly room of the new building. From that time to this, not less than two, and frequently as many as four, neighborhood meetings have been held at the school each month. On a cold night in February the large assembly room seating four hundred people was crowded to its capacity. The program opened with a short excellent literary and musical program given by the pupils of the school. A recess was then taken, and light refreshments were served from the domestic-science kitchen, the class having charge of the serving. The program was again taken up, lecturers from the state agricultural college speaking on various phases of agriculture and country life, and giving demonstrations. The assembly adjourned at ten o'clock, having spent a very profitable and pleasant evening, and incidentally having become firm friends of and believers in their consolidated school.

At the various programs held at this school during the year, distinguished speakers and musicians have been heard and the audience room has each time been filled with the pupils, patrons and friends of the school. There has been no lack of appreciation of the many good things presented. Scores of families who before scarcely knew one another's names have met and become acquainted. New friendships have been formed, old grievances obliterated, and a spirit of interest in the common welfare has been created. This consolidated school, had it done nothing more than supply a social center for its community, has well been worth all it cost.

The John Swaney consolidated school of Putnam

County, Illinois, is another example of a modern rural school serving the entire community. This school, con-

The John Swaney school as a neighborhood center taining laboratories, a library, manual-training shops and a domestic-science room, has also a basement

playroom, and a large assembly room capable of seating several hundred people. The school has literary societies organized to include every pupil from the primary room through the high school. These literary societies meet every two weeks, giving various forms of programs. Several times each year plays, concerts and other forms of school entertainments are given and the public is invited. The school also has its musical organizations, and a strong athletic association which includes in its membership nearly every boy in the school. The girls likewise have their athletic teams. A large wooded campus is arranged for all the major athletic sports. At the school are held almost all forms of social meetings that could interest a community; agricultural conferences, stock and grain judging contests, demonstrations and lectures by agricultural specialists, and club meetings of various sorts. There is also maintained a well-patronized lecture course in which the highest type of platform ability is represented. It is needless to say that the young people of this community are not found drifting to the near-by villages and towns for their recreation and amusement. It has also been found in consolidated-school communities that the trend from the country to the town as a place of residence has been checked, and that better teachers can be kept from leaving the rural schools. Of one thousand and one hundred cases of removal from country to city personally investigated by T. J. Coates,

supervisor of rural schools in Kentucky, more than one thousand were caused by a desire for better school, church and social advantages.

And so we might go on describing the work being done by the consolidated schools in various parts of the

To supply a social center a chief function of consolidated school

country; for those we have mentioned are in no sense exceptional, at least in the spirit they manifest or the co-operation they win. Dozens of

lecture and entertainment courses are being well supported in different consolidated schools, where are heard some of the country's most famous speakers. Statesmen present from the school platform the great political and social issues before our people. State and government experts come to the school center with their message of higher ideals and larger success for country life and work. Farm boys hold their corn club, and girls their canning and garden club, meetings at the schoolhouse. Here are held social functions of all kinds for the entire community. The consolidated school, as it is growing up in the United States, is finding one of its great missions in supplying the neighborhood social center of which the country stands so greatly in need.

FOR TEACHERS' DISCUSSION AND STUDY

1. Do you think the people in your school community take enough time for recreation and social enjoyment? What means of social recreation have the young people? How many of them go to entertainments in near-by towns?

2. Looking over the population of your district, do you think the farmers and their wives are aging faster



A consolidated building, accommodating forty-two square miles of territory, and maintaining a four-year high school



A rural community centre with its consolidated school and church

than they should? What, in your judgment, explains the fact that farmers' wives show a larger percentage of insanity than women in other occupations?

3. To what extent is your schoolhouse used as a social center? Could this use of the school plant be extended? What would be necessary in the way of additional equipment?

4. Do you know how the young people of your community feel about the comparative merits of country and town as a place to live? What are the chief points of attraction the town possesses for them?

5. How many days a year is your schoolhouse actually in use? Is it not a poor financial policy to lock up so large an investment the greater part of the year, when the school property could well be used for many other purposes than school work?

6. Do you think it practicable to make the one-room schoolhouse serve as a neighborhood center? Do you think it practicable to make the consolidated school serve such a use in your community?

7. To what extent do you think such social and athletic activities as those described in the chapter are a factor in making boys and girls satisfied with farm life?

8. Could you teach children to play a wide range of games and plays? Do you think it pays a teacher to prepare in this line? Is such knowledge worth while even outside of school? Do you know the rules of games well enough to act as an official in judging contests?

CHAPTER XVII

THE RURAL HIGH SCHOOL

The American high school is a product of the last fifty years. Its forerunners in the field of secondary education,

Growth of the American high school

the Latin grammar school and the academy, never gained the hold on the affections of our people that the

high school has attained. Neither has the elementary school appealed as strongly as the high school. Although free in their support of elementary education, the American people have been doubly generous in maintaining the high schools. Almost every town and village boasts its well-equipped high school. Especially during the last decade has the high school increased in importance and power. Its attendance, now one million three hundred thousand, has proportionally outstripped that of the elementary school, its curriculum has been vastly broadened and enriched, its buildings and equipment have become marvels of excellence and completeness, and the funds placed so liberally at its disposal have not unfrequently necessitated unwise economies in the support of the elementary school.

This rapid development in high-school education has, however, hardly as yet touched the rural schools. Only

The high school still rare in rural communities

here and there do we find high schools as an integral part of rural education. The accepted standard for the rural



By courtesy of Mr. Barksdale Hamlett, Superintendent of Public Instruction, State of Kentucky.

Has not the farm boy a right to as good an education as the town or city boy?

school has in most places been an elementary course of eight years. The farm child who has had an opportunity at this grade of school has been looked on as having all the education required, or at least all that could be expected. High schools have been considered out of reach of country districts, or as belonging only to city people.

But this standard is passing—has already passed in many rural communities. Rural children require as much

High-school training necessary for farm children education as the children of towns and cities. The demands placed on their intelligence and training in a ca-

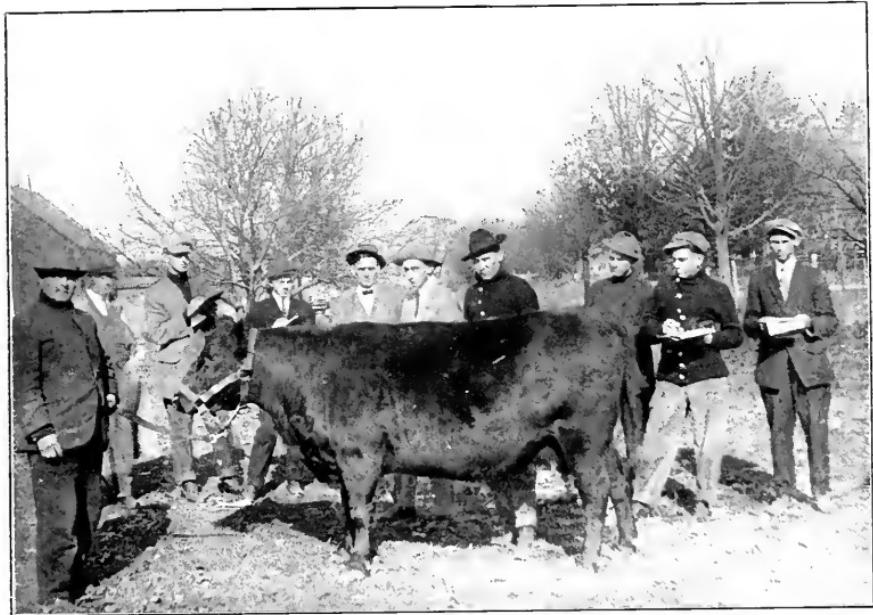
reer on a modern farm are at least as great as will be made on the average urban worker, and their ability to profit by this advanced education is certainly not less. The willingness of the rural communities to provide high-school education for its youth is one of the first tests of its right to the loyalty of the young people. The four years of school privileges above the elementary grades now so generally available to urban children must be similarly open to country boys and girls, else we can not blame them for deserting the farms for the better educational opportunities afforded by the town. The high school must be free and it must be accessible to the boys and girls of the farm.

The high school is not yet free to the majority of rural children, even if they are willing to go to town for their

Free high schools not generally accessible high-school training. In many states the rural youth must himself pay a tuition of from three to five dollars a month if he attends the nearest town high school. His district disclaims all responsibility for his education after he completes the elementary school. Some states, as

Iowa, for example, have recently provided that graduates of rural schools may attend the nearest high school, the district to pay the tuition fees. But in the Iowa law, reasonable as the demand on the district is, the liability is limited to three dollars and fifty cents a month, any amount in excess of this devolving on the pupil.

But even where the rural district freely pays the tuition in the town high school, such a situation is far from satisfactory. The high-school training afforded rural children should be in rural high schools and not in town and city schools. Not only in curriculum but in spirit and in teaching, the rural high school should represent the life and activities of the farm. If the rural high school is to maintain an adequate standard of efficiency, if it is to serve its patronage aright, it must take into its program of studies training in the concrete affairs awaiting its graduates. There are at present more than two thousand public and private high schools in the United States teaching agriculture, but comparatively few of these have actual country environment, most of them being situated in towns and cities. Such is also true of the more than one hundred special agricultural schools of secondary grade located in seventeen different states. While the agricultural courses taught in the city school are valuable as educational material and well worth while from the standpoint of general culture and development, yet of necessity they lack the vitality and concreteness possessed by similar courses taught with an immediate environment of farm life and conditions. In the reorganization of rural education that is now going on, therefore, there must be definite provision for the installation of high schools as a part of the rural system.



Judging cattle at a rural school



Judging horses at a rural school

The rural high school is a natural outgrowth of the movement toward consolidation. It need hardly be argued that the one-room school can never support a high-school course, nor ought it under any circumstances to undertake the teaching of high-school branches, except in rare instances where a number of the elementary grades are lacking from want of younger children in attendance. It has been almost uniformly found that the consolidating of a number of elementary schools into one school has brought about a demand for the introduction of high-school subjects. Hence a large majority of the fully consolidated schools are now offering two or even four years of high-school work. Not a few of the consolidated rural schools in Indiana, Ohio and many other states, are fully equal in the scope and character of the curriculum and in the quality of teaching to the best town and city schools. The rural high schools in such communities are recognized by the colleges and universities, and their graduates are accepted on the same terms as those from urban schools.

Rural high schools follow consolidation

It may therefore be concluded that the policy of consolidation ultimately commits to the introduction of rural high schools as a part of the system. This is natural and right, since consolidation not only encourages the regularity of attendance that allows completion of an elementary course preparatory to the high school, but also provides the type of curriculum and teaching necessary for such preparation. Further, the educational standards of communities supporting consolidated schools demand opportunities for high-school education for their children.

Certain regions, as in Illinois, have developed the township system of high schools independently of consolida-

tion. Many of these township secondary schools are of high grade, fully the equal of town and city schools; in fact the township high school not the solution indeed, not a few of them are conducted in some convenient town or city of the township and are in effect not rural high schools at all. They offer the traditional high-school course of study, are governed by the typical urban high-school spirit, which looks not toward farming but to other lines of occupation, and are therefore not the type of secondary education most useful to rural communities.

In other sections of the country, county high schools prevail, the county supporting one secondary school open to all qualified residents within the county. The county high school can be approved only as a temporary expedient to supply secondary education at a time when the economic ability is not equal to the burden of supporting high schools available to every community. In order to be wholly efficient, the high school must, like the elementary school, be brought to the door of those for whom it is intended—and must not require traveling half-way across a county in order to obtain its advantages. Nor must it demand that the pupil leave his home and enter the school as a boarding-school. To be truly a school of the people the rural high school must be connected with the rural elementary school, which is equivalent to saying that it will become a part of the consolidated school of the future.

The rural high school should not only be situated in the country, away from the town and city, but must in fact be a country school. Its curriculum, while as thorough and comprehensive as that of any standard high

school, should be different from the curriculum of the town high school. For the rural high school must be essentially a vocational school, preparing for the occupations of the farm and the farm home, instead of for the college and the profession. The core of the curriculum will therefore be industrial and scientific, and not linguistic and mathematical.

Louisiana agricultural high-school course The course of study of the state agricultural high schools of Louisiana indicates a recent hopeful trend in rural high schools:

YEAR	SUBJECTS	Periods Per Week	Semesters Given
I	Agriculture (boys).....	3	2
	Shop and field practise (boys)	4	2
	Sewing (girls).....	3	2
	Cooking (girls).....	4	2
	English	5	1
	United States History.....	5	1
	Medieval and Modern His- tory	5	1
	Farm Arithmetic.....	5	2
	Botany	4	2
	Drawing	1	2
	Music	1	2
II	Soils and Fertilizers (boys)..	3	1
	Farm and Crops (boys)....	3	1
	Shop and field practise (boys)	4	2
	Mechanical Drawing (boys)	2	1

YEAR	SUBJECTS	Periods Per Week	Semesters Given
	Sewing (girls).....	2	2
	Food Study (girls).....	1	2
	Cooking (girls).....	4	2
	History	2	1
	English	5	2
	Algebra	5	2
	Entomology	3	1
	Zoology	5	1
	Horticulture	3	1
	Drawing	1	2
	Music	1	2
III	Farm Animals (boys).....	5	2
	Field practise (boys).....	6	2
	Physiology (girls).....	5	1
	Sewing (girls).....	2	2
	Cooking (girls).....	2	2
	English	3	2
	Ancient History	3	1
	Plane Geometry	4	2
	Chemistry	5	2
	Horticulture (landscape)...	1	1
	Poultry	3	1
	Drawing	1	2
	Music	1	2
IV	Agricultural Engineering (boys).....	5	1
	Field practise (boys).....	6	2
	Farm Management (boys)...	5	1

YEAR	SUBJECTS	Periods Per Week	Semesters Given
	Dietetics (girls).....	5	1
	Household management (girls)	5	1
	Cooking and Sewing (girls) .	6	2
	English	3	2
	Physics.....	5	2
	Farm Bookkeeping.....	3	1
	Rural Law.....	5	1
	Dairying	3	1
	Drawing	1	2
	Music	1	2

Colebrook Academy, in New Hampshire, is a typical New England rural high school reorganized to meet the needs of its community. Its agricultural course for boys enumerates the following subjects: English, advanced arithmetic, agronomy, farm mechanics, carpentry, practical mathematics, animal husbandry and dairying, farm blacksmithing, physics, horticulture, road building, forestry, American constitutional history, chemistry, rural economy and farm management, and physiography.

Curriculum of Colebrook Academy

The domestic-arts course for girls offers the following studies; English, advanced arithmetic, sewing, cooking, ancient history, dressmaking, millinery, designing, biology, French, household design and decoration, household mechanical appliances, household sanitation and hygiene, physics, American history, chemistry, dietaries, nursing, and household economics.

It is to be observed that neither of these schools re-

quires Latin or solid geometry of either sex, and that algebra, even, is not required of girls in the latter school.

Disciplinary subjects omitted The traditional disciplinary subjects are supplanted by concrete and practical studies related to occupational interests. The English language and literature, however, are studied the entire four years, and history occupies an important place in the curriculum. The study of music and art is not provided for in the New England school, which probably offers the chief ground for criticism of the course.

The equipment for the rural high school should be wholly adequate to the demands to be placed on it.

Equipment of the rural high school Many of the high schools connected with the stronger consolidated schools now have buildings, laboratories, gymnasiums, baths and other necessary accessories quite the equal of those of the city schools. And this is as it should be. Where right business methods are employed in consolidating the school, and in arranging for the bonds and levying the tax, the burden is no heavier on the rural community than on the town district. Nor is the expense of maintaining the school after it is established greater in proportion to the taxable property than in most cities, and it is considerably less than in many.

The rural high schools already in existence have been so successful as abundantly to prove the feasibility and

Examples of successful rural high schools wisdom of their extension. Such schools several miles from the nearest town or village in the state of Indiana carry on the full set of secondary-school activities with at least as great enthusiasm and efficiency as would be found in any urban high school in the land. Not only

is the scholarship of the highest rank, but the graduates receive their full share of honors when they enter on a course in higher institutions. These rural high schools have their literary societies, dramatic organizations, debating clubs, orchestras, and all else that goes to supplement on the social side in the regular program of the modern school. The rural high-school boys have shown athletic ability that may well excite the envy of the city athletic teams; the basket-ball team of a rural high school in Indiana recently held the state championship against all competitors. Other states where equally strong rural high schools have been established can show as good results in all these lines.

An excellent example of a typical rural high school is shown by the Farragut school in Tennessee. This school

The Farragut high school stands in the open country one and one-half miles from Concord, a village of some three hundred people. The school building is a two-story brick with basement. It has a complete water and plumbing system, owns twelve acres of land and has cost the community some seventeen thousand dollars. The building gives room for a full complement of laboratories for the teaching of science, agriculture, home economics and manual training. The water for the building comes from a large spring some distance away and is pumped by a double-acting rifle ram driven by a near-by creek. This spring water is delivered to tanks in the attic whence it is conveyed to all parts of the building, to the principal's home near by, and to the school barn. Drinking fountains are located in all halls and in the lunch rooms, which are provided separately for each sex. Well-equipped lavatories and toilet rooms are found in the building, and the laboratories have wash-

bowls and sinks. Shower baths for both sexes are installed in basement rooms and the water is carried away by sewer pipes into the creek. Six acres are devoted to buildings, playgrounds and decorative flower gardens. The other six acres of the school plat are used for demonstration purposes for agriculture. The school employs a man the year round to serve as janitor, and caretaker of the school farm.

The school offers a fully organized course in agriculture, including the care and breeding of stock. A flock of chickens is maintained and used in teaching this phase of animal husbandry. Although the high school offers a college preparatory course, ninety per cent. of the pupils are taking agriculture, manual training and the home-economics course. The attendance at the school has nearly tripled within the last four years since the vocational courses were added. As an important part of the school's social organization, there is held once each month what is called a "moonlight social." An interesting program is given consisting of lectures along some phase of farm life, music, games and other social features. Occasionally athletic events are held at the school, the entire neighborhood participating. The students of the school also give a dramatic performance each year at commencement time.

A similar agricultural high school was opened at Manassas, Virginia, in 1908. Here also twelve acres of **The Manassas high school** ground are included in the lawn, playgrounds, demonstration plots and gardens, with four acres devoted to demonstration work. The rural life of the community is organized about this school as a center. The work during the school year is only a part of the varied activities of the school, all

students carrying out different home projects in agriculture as a part of their regular school requirement. The high school fully maintains its standard among urban high schools of its locality. It is offering for the first time this year a normal course designed to prepare teachers for the rural schools, and especially to give them preparation in agriculture and domestic science. In connection with the high school are given winter short courses in agriculture and stock raising which are largely attended by the farmers of the vicinity. Short farmers' institutes are also held on the school grounds with addresses and demonstrations given by experts from agricultural schools and colleges. The domestic-science classes have been utilized in serving lunches to visitors and patrons on gala days, thus gaining practise for themselves and still further interesting the community in their school work. It is freely admitted that this high school is doing more than any other factor of its locality to break up the isolation and social monotony of the rural community, and replace it with a neighborhood spirit of cooperation and good-will.

As an illustration of some of the practical activities of the school, there are made in the laboratory each year some two hundred tests of milk and cream coming from the farms of the community. Before a farmer buys a cow, he obtains a sample of her milk and sends it to the school for a test. Cream shippers are also asking for tests of their cream in order to make sure of its passing the inspector. Growing out of such work, the neighborhood has organized a cow-testing association of about a dozen enterprising dairymen, who have stopped guessing about their stock and insist on *knowing* by means of scientific measurements.

The principal of the school, who is a graduate of one of the leading agricultural colleges, is constantly called **Loyalty of the patrons** on for his judgment concerning flowers, trees, shrubs and the insect enemies of the region. His advice is sought with reference to the rotation of crops, drainage, stock and all other matters connected with the agricultural interests of the community. All these things go to indicate the intimate connection which has been set up between the school and its patrons. The farmers have come to recognize the school as their own, and both its future and its usefulness are now fully assured.

Scores of similar illustrations from different sections of the country could be given to show the part that may **Outlook for the rural high school** be played by the high school in rural life and education. Wherever the high school has been installed as part of the rural system, it has rapidly grown in favor among its constituency, and has gained a permanent hold on their loyalty and support. Once the farming community comes to see the necessity and value of secondary education for its children, the country child will have as favorable an opportunity for high-school training as the city child. Only when this has been accomplished will our system of rural schools have fulfilled their obligation to the children of the farms. For only then will the country boys and girls have available the amount and type of education necessary for a successful career, and requisite to a full development of their own powers and capacities.

FOR TEACHERS' DISCUSSION AND STUDY

- I. What proportion of the boys and girls in your township between fourteen and twenty-one years of age

either are in high school, or have had a high-school education? Why is not the proportion larger?

2. How many boys from your township have in the last five years attended a town high school? How many of them plan to take up farming as a vocation? Is it true that the town high school leads away from the farm?

3. Do country children in your locality have their tuition paid by the district, if the district has no high school of its own? Is there any reason why graduates of rural schools should not have high schooling supplied at public expense, as well as town children?

4. What is your judgment of the high-school course outlined in the chapter? Does such a course supply as thorough an education as the ordinary town high-school course?

5. Latin as a requirement is rapidly dropping out of many high-school courses. Do you believe that this is a mistake?

6. Count the number of boys and girls in your township who have now quit school, but who probably would have had a high-school education had a rural high school been available.

7. Account for the fact that well-established consolidated schools almost always result in the addition of a high school as a part of the consolidated school.

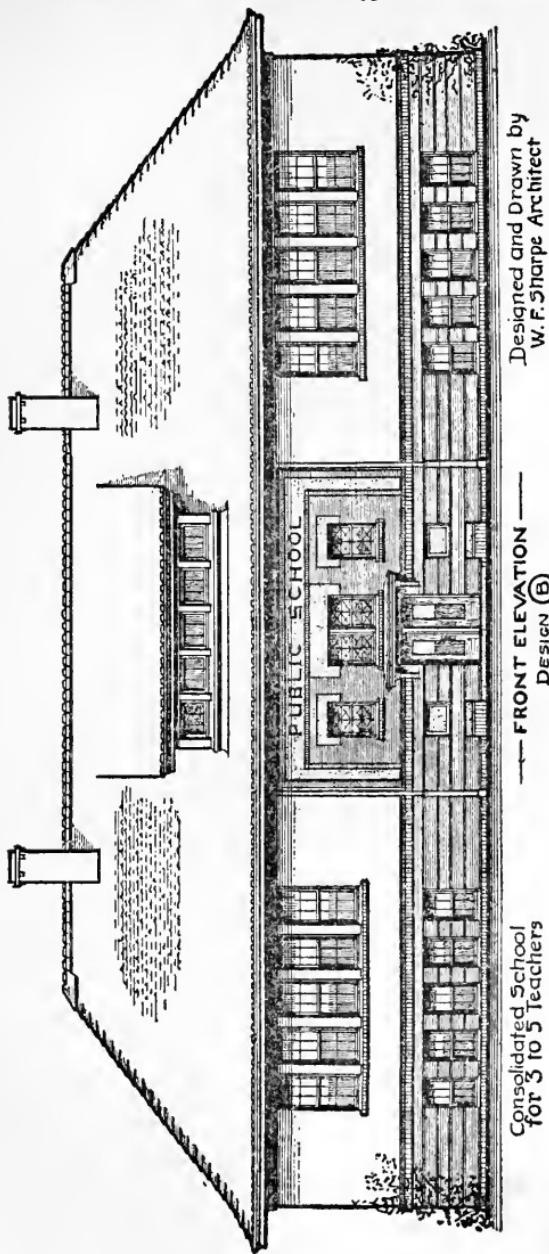
8. What advantage can you urge for rural high schools like those described in the chapter against town or city high schools as a place to educate farm boys and girls? What disadvantages? Do you think country boys and girls are to be blamed for tiring of the average rural school?

CHAPTER XVIII

THE CONSOLIDATED BUILDING AND EQUIPMENT

Consolidation is resulting in better buildings and equipment than have heretofore belonged to rural education. First of all, the building must in nearly all cases be new. And school standards and schoolhouse architecture have advanced to the point where a certain disgrace is coming to be felt by those who favor or condone inadequate or unsuitable buildings or equipment. The consolidated school usually serves a territory large enough to supply a reasonable amount of money for school purposes without making the tax burdensome. It represents a constituency progressive in school affairs, and hence desirous of securing the best their means will afford for their children. The consolidated buildings therefore show a vast improvement over the old type of country schoolhouses.

One of the most frequent mistakes being made in erecting consolidated buildings to-day is in making them too small. It is thought that the rural population, unlike the city population, is not likely to increase, and that therefore the building capable of accommodating the present children of the territory will be adequate for the future. Almost universally, however, it has been found that the con-



Consolidated School
for 3 to 5 Teachers

— FRONT ELEVATION —
DESIGN (B)

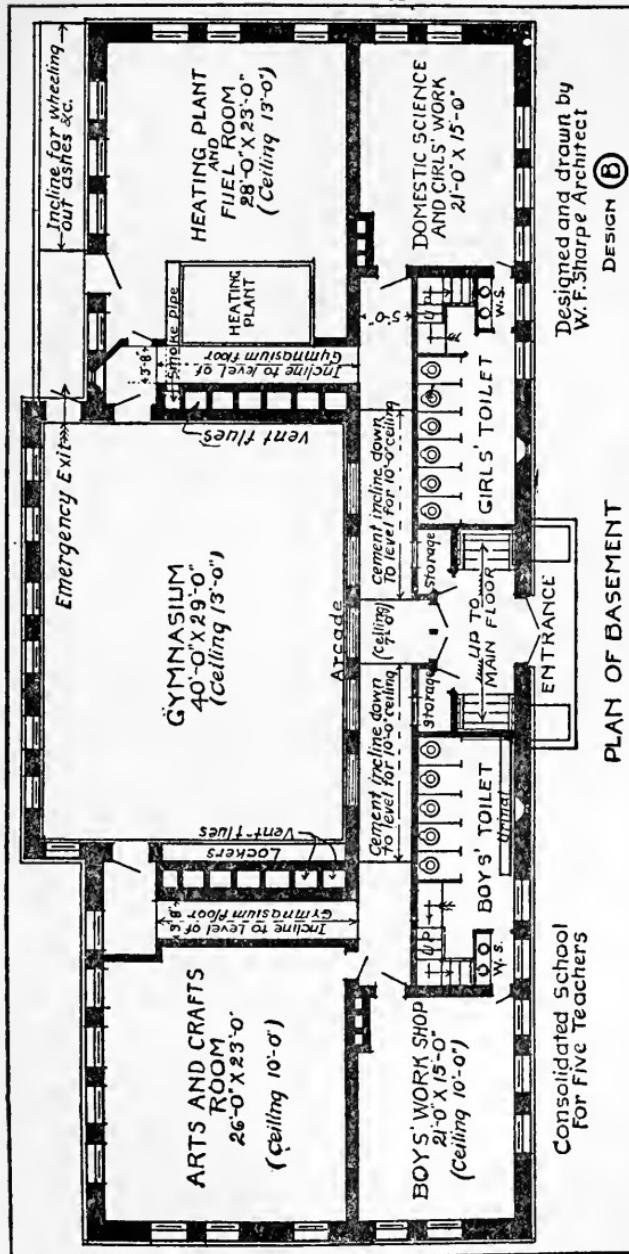
Designed and Drawn by
W. F. Sharpe Architect

The cost of this building is approximately twelve thousand dollars.

solidated school attracts from twenty-five to fifty per cent. more pupils than were enrolled in the district schools of the same territory. It is always necessary on this account to plan for a considerably larger number than those belonging to the abandoned schools. Many districts have found that within two or three years after starting a consolidated school the accommodations first provided are wholly inadequate for the number who desire to attend.

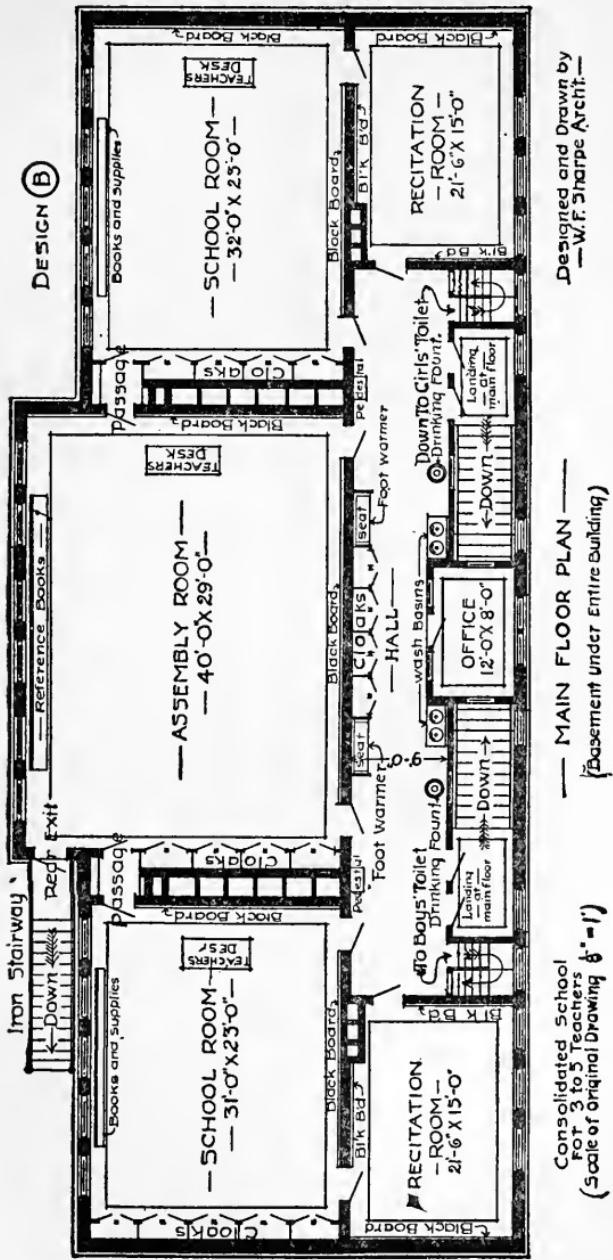
County superintendents and other school officials in counties that are leading in consolidation say that over one-half of the first consolidated schoolhouses erected have been found inadequate in size within the first three years. In one northern county five of the best consolidated buildings were reconstructed during the year 1913 for the sole purpose of securing more room. Not only had the pupils overcrowded the rooms, but additional space was required for the constantly growing classes in agriculture, domestic science and manual training. Two of these five buildings were built over for the second time within the last five years. Of course this represents poor economy and lack of foresight on the part of those who planned the buildings. Architects and contractors find that it costs approximately twice as much to add a certain amount of room to an old building as to incorporate the same amount when the building is being erected. One consolidated district reports that a four-room building which was erected in 1908 at a cost of fourteen thousand dollars has recently been enlarged at an additional cost of fifteen thousand dollars in order to accommodate one-third more pupils. Another district has just expended fifteen thousand dollars in enlarging a ten-thousand-dollar building.

**Many buildings re-
constructed to se-
cure more room**



Not only is the increased attendance in the elementary school to be anticipated and provided for, but it is well to look forward to the starting of a high school, even if none seems possible in the immediate future. For most of the better located consolidated schools will finally add the high school. This has been the history of the matter wherever the consolidated schools have secured a good footing. It is not necessary, of course, to provide room in a building now being erected, for a high school that exists only as a cherished dream which can not be realized for some years to come. It is often possible by a little foresight, however, so to plan the present building that additions can be attached when occasion requires without marring the symmetry or reducing the efficiency of the structure. Architects gladly take such contingencies into account, and provide for their later consummation when drawing their plans.

The first requisite in planning for a consolidated building is to give it ample grounds. Such a school is usually located where sufficient room can be had and where there is no need for economizing to the point of parsimony in the amount secured. The area of the grounds will, of course, need to depend on the number of districts being consolidated, and the size of the proposed new school. It is safe to say, however, that the consolidated school should always command at least three acres of ground, and usually as much as five. When the school includes a high school where courses in agriculture are taught, still more ground will be required, especially if demonstration and experimental work are to be carried on at the school. Ten or twelve acres will then not prove too much for school gardens,

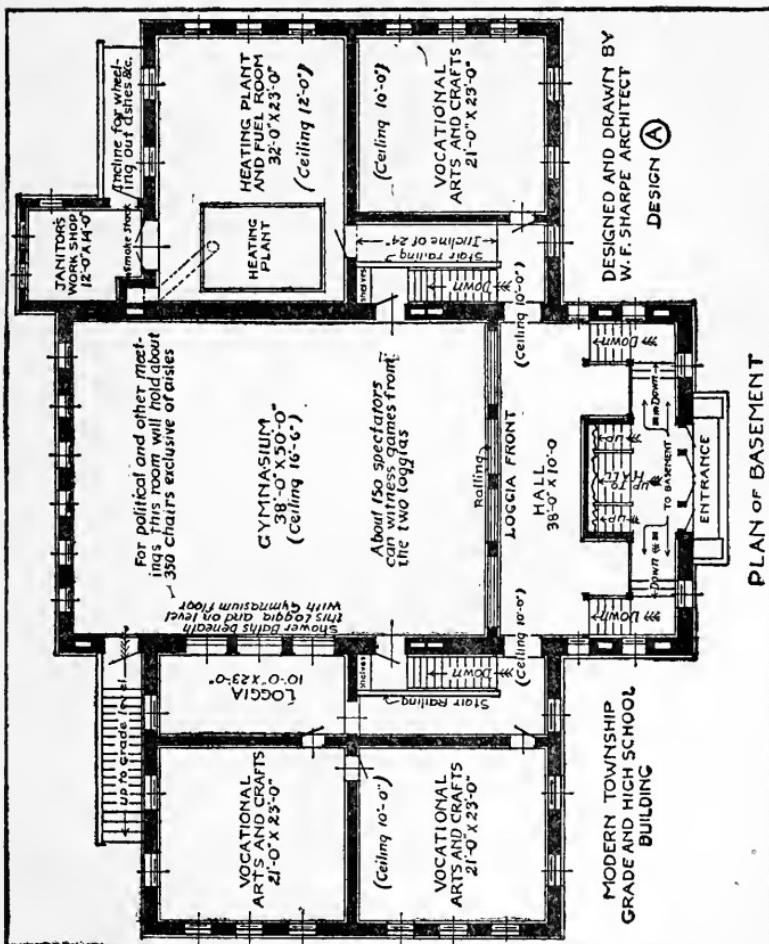


agriculture, decorative shrubbery and trees, playgrounds and athletics.

Wherever possible, the consolidated building should be of a permanent type, constructed of brick, or stuccoed Building to be tile, instead of wood. This is not only of permanent a measure of safety for the children, material but it is in the long run a matter of economy. The difference in painting, deterioration and insurance rates will pay large interest on the additional first cost. The floors should be of maple or oak, and the woodwork of oak. The blackboards should invariably be of slate and the walls finished sanded instead of smooth, ready for tinting. In no case should stairs be built of inflammable material, no matter what the construction of the remainder of the building. Lives are too precious to run the slightest risk of trapping the children in case of fire. Fire-escapes of ample size and approved type should be provided for all buildings of more than one story.

The equipment of the consolidated school, like the building, must be determined by local conditions. It goes without saying, however, that Mistake of economizing in equipment the equipment must be wholly adequate to the work undertaken by the school. It is poor policy to economize upon the tools necessary for doing the school work. Each room should have a full complement of charts, maps, globes and the apparatus demanded in its studies. Dictionaries and reference books suited to the advancement of the pupils should be freely provided. Supplemental readers should be supplied for every grade. A well-stocked library of general reading should be one of the first considerations.

It is manifestly impossible to lay down any rule for the



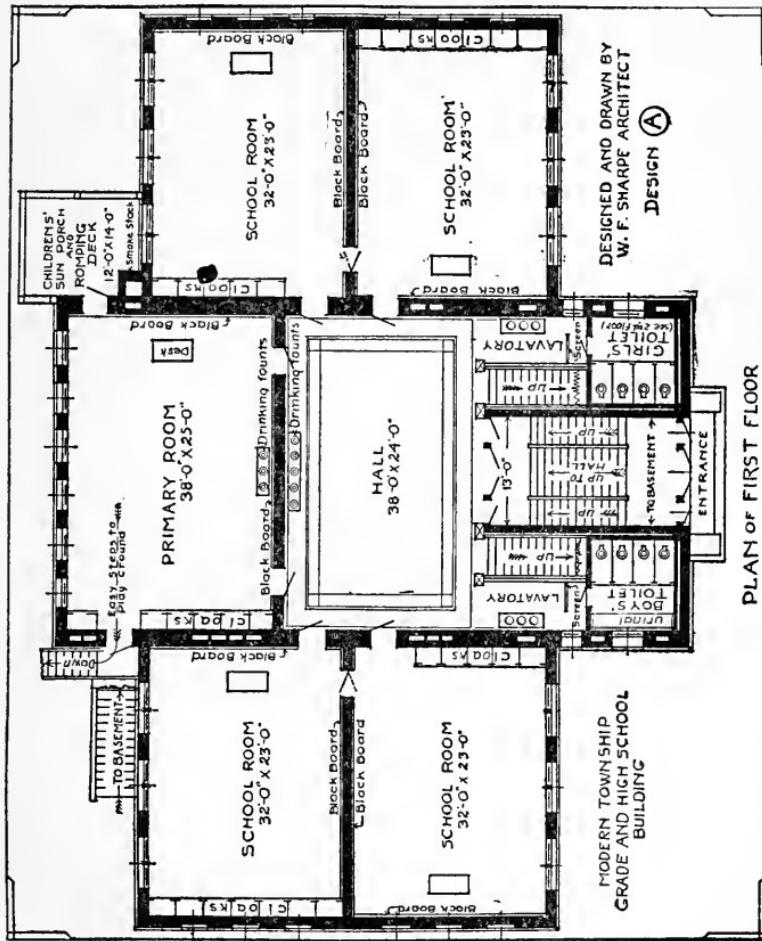
The cost of this building is approximately twenty-five thousand dollars.

size and cost of consolidated buildings any more than for town or city buildings. These questions will depend on the use to be made of the building, and the financial ability of the district. Consolidated schools are being conducted in buildings running all the way from three thousand to seventy-five thousand dollars or more, and containing all the way from two to ten or twelve rooms.

A somewhat more detailed consideration of certain types of consolidated buildings will be instructive.

The better class of three-teacher consolidated school buildings now being erected may be described somewhat **The three-teacher building** as follows: The building rests on a concrete foundation forty by one hundred feet, and has a cemented and finished basement under all. The schoolrooms are good size, about twenty-five by thirty feet, and are lighted from one side and high windows at the rear. The seating is of the most modern type, all seats adjustable for size, and supported on a single iron pedestal. The assembly room is thirty-two by forty-two feet, and seats some two hundred and fifty people without the adjacent class rooms, which are connected with the assembly room by folding doors, so that the entire floor space can be thrown together if desired. The assembly room seats are movable, and can be taken out or moved to the walls if occasion demands. The hallway is twelve by thirty feet, and has in it two flowing drinking fountains. Cloak-rooms are provided separately for boys and girls. The interior closets and lavatories are of approved hygienic type. An office is provided for the principal, and a telephone installed for the convenience of the school and patrons.

Library shelves are built into the walls, and protected by glass doors fitted with excellent locks. Enclosed



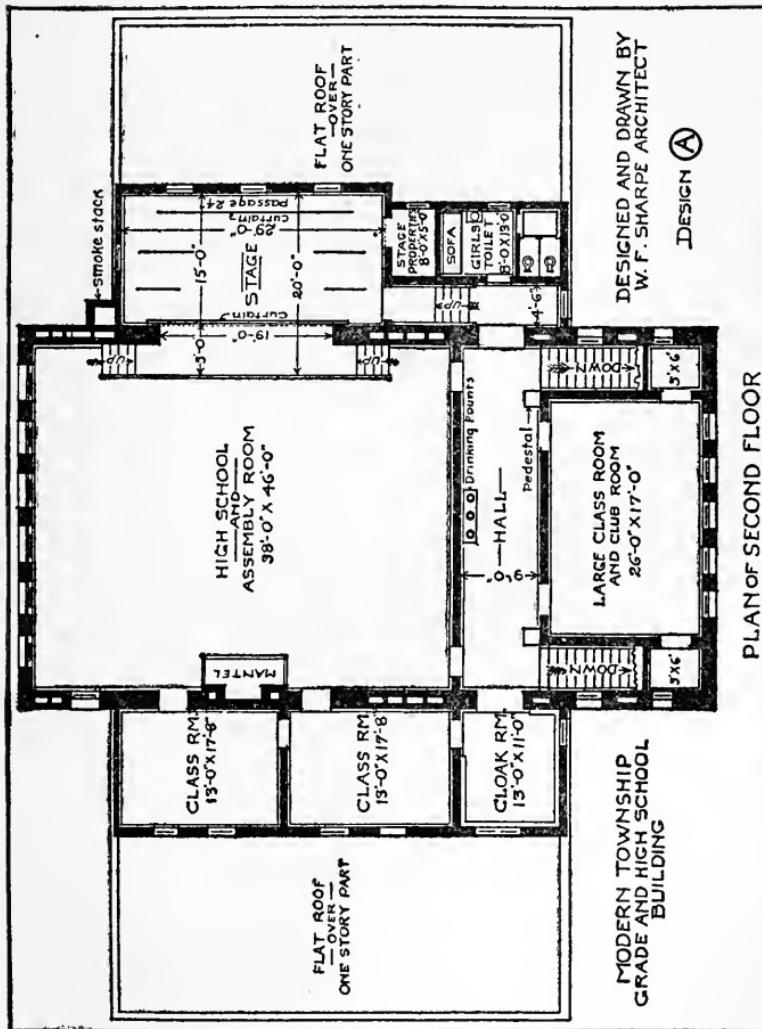
shelves are also provided for dinner pails, where they will be free from dust and safe from freezing.

The blackboards are equal in length to fully half the perimeter of the room, and are of slate. Electric signal bells connect all the class rooms with the principal's office and with the assembly room, so that classes may be moved or the school dismissed in unison.

The basement contains a furnace and fuel room, a playroom, domestic-science kitchen and manual-training

The basement shop. While such a provision may be necessary for the smaller schools, it is doubtful whether the basement is the best location for the work in domestic science. Whenever possible this laboratory should be on one of the main floors of the building, and possess at least as good lighting and ventilation as any class room. The walls in the basement rooms are tinted with a light color in order to increase the light. The stairs into the basement are of iron and cement, low risers and broad tread, and well protected by banisters. Exits are provided from the basement directly out-of-doors, so that pupils can go to or from their work without passing through the upper rooms. This arrangement is also a necessary safeguard against danger from fire, and should never be omitted in the plans for a building.

Heating The heating plant of this building consists of a simple gravity furnace of generous size for the space to be heated. This avoids the necessity for crowding the furnace on cold days, and thereby both scorching the air in the schoolrooms and burning out the furnace. The furnace is so set as to favor the north and west sides of the building, which are most exposed to winter winds.



The water supply comes from a deep driven well, and is delivered to the schoolroom fountains by means of a force pump and a pressure tank which is installed as part of the system. A number of firms now supply such apparatus, the whole system, including the fountain, costing less than one hundred dollars if the well is close to the building. The same system delivers water to the lavatories and toilets, hence considerable pumping is required. In some instances a small gasoline engine is used for this work.

The school building is provided with an acetylene lighting plant, with burners in each room, and an abundance of light for the assembly room. All **Lighting system** furniture, shades and other equipment of the school are in first-class repair. A full supply of apparatus for elementary work in science, agriculture, domestic science and manual training has been provided. This building and its equipment cost the district about twelve thousand dollars with the ground.

The building which is to accommodate a four or five-teacher school will need to follow the same general principles in its construction as the smaller buildings, and will not require separate discussion. The primary consideration in starting the erection of any type of structure is to see that the officials who have the building in charge are thoroughly imbued with the spirit of progress, and have such information concerning modern standards as will fully convert them from the old type of schoolhouse as their criterion.

When more than five teachers are required in the consolidated building, the structure will then not be far different from that of town or city schoolhouses of the same size. Where-

ever the high school is added to the consolidated school, not less than five class rooms in addition to the assembly room should be provided. It is better to have six, or even seven, so that divisions of grades can be made as required.

Whenever the consolidated building required is large enough to add a gymnasium in the basement this should be done. Recent buildings intended **Gymnasium** for from eight to ten teachers, including the high school, provide a gymnasium forty by fifty feet, fourteen feet in height. The usual apparatus is installed, taking care that both sexes are included in the provision made. School officials should hesitate long to erect a consolidated building which is to house a high school as well as the grades, without a spacious gymnasium as a part of the equipment.

If it seems that the buildings and equipment discussed for the consolidated school are expensive, it must be **School buildings** taken into account that all building is growing more costly now much more costly than when the buildings at present in use were erected. This is true both because of the increased cost of materials and labor, and because higher standards of excellence are demanded. The average one-room building erected in the Middle West ten or fifteen years ago cost from five to eight hundred dollars. Very few one-room buildings are now being put up in this same region for less than twenty-five hundred to three thousand dollars.

It is further to be understood that if the practical laboratory subjects are to be added to the curriculum, larger and more expensive buildings and equipment must be provided. As long as education consisted solely

of teaching children from books, a simple schoolroom equipped with desks set close in rows was all that was required. But when education is conceived as learning things by actually doing them, further room and equipment are demanded. A worse mistake could hardly be made than to require the teaching of agriculture, manual training or domestic science, and then expect them to be taught under the same conditions and with the same equipment that have served for training from books.

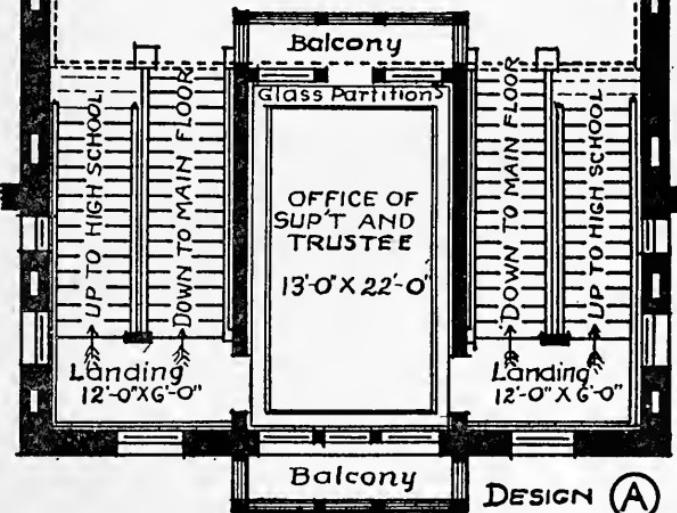
The financial burden involved in erecting and equipping a new consolidated building often appears greater than it really is, and not infrequently deters from beginning the enterprise when it would not if the facts were better understood. The area of an average consolidated district may fairly be taken at twenty-five square miles. The value of all taxable property of such a district will, in most parts of the United States, easily reach from five hundred thousand to one and a half million dollars. Now it is evident that if the district decides to erect a fifteen-thousand-dollar building the tax rate required to meet the expense will, in the latter instance, be ten mills. If fifteen-year bonds are sold at five per cent., the approximate increase of school tax will need to be only about one mill annually. This on an eighty-acre farm and its equipment will surely not seriously embarrass any farmer. Especially does this seem a moderate amount to pay for improved school privileges when it is known that the increased school tax rate occasioned by the erection of new buildings reaches as much as five mills in many towns and cities in all parts of the country.

The matter of choosing a suitable location is one which

MODERN TOWNSHIP
GRADE AND HIGH SCHOOL
BUILDING

UPPER PART OF HALL

Designed and Drawn by
W. F. Sharpe Architect



PLAN OF SUPERINTENDENT'S OFFICE
AND MIDWAY LANDING

should not be passed by lightly. For this type of building is a somewhat permanent structure. The average **The site for a consolidated school** district building can be moved and re-moved, but not so with the consolidated building. Its site, therefore, should be selected with the future as well as the present in mind. The grounds must be ample, well drained and sanitary in every particular. All undesirable industries, railroad crossings, dangerous streams, gravel banks and quarries must be out of easy reach of the children.

A few shade trees and a fertile soil are desirable but not essential requirements, for they can be had in the

Donations not to influence selection of site course of a few years on almost any site. The location should be the most convenient and accessible one. In no case should some selfish freeholder be allowed to determine the choice of the site by offering to give an acre or two of ground, either conditionally or unconditionally. Altogether too large a percentage of the district schools have been located and are now controlled by this type of philanthropist. The consolidated school must not in any way be under obligations to one or two individuals. Nor should it be situated adjacent to a country church if there is the least danger of jealousy arising on this account. If no such feeling exists there may even be some advantage in having the church and the school near together.

An artistic and well constructed school building, erected in a spirit of unity and cooperation, is a source of **Value to community** strength to any community. It engenders a sense of local pride, and a feeling of common neighborhood interests, even if it requires something of sacrifice in its erection. What it costs in increased taxation is more than compensated for

in the satisfaction of seeing the children well and hygienically housed, and the school provided with all facilities for efficient work. The building of such a structure constitutes not an outlay, but an investment for any community, and is never afterward regretted.

FOR TEACHERS' DISCUSSION AND STUDY

1. How do you account for the fact that the consolidated building is almost always built from better material and more adequately equipped than are the district schools in the near-by communities? About how many square miles do the consolidated buildings accommodate?

2. Try to find out what per cent. of children of school age are now enrolled in your district schools and what per cent. are enrolled in your consolidated schools. Make a study of those pupils who are now out of school and who have not completed the elementary work. Compare consolidated territory with the territory served by the district schools.

3. Can larger and better buildings alone be depended on to attract more of the older pupils to the school? Why do they help secure better teachers? Is your building too small? Describe your home school building as to plans and architecture. How much did it cost?

4. What additions or changes as to building plans would you suggest for your school building? Make drawings for a one-teacher building and for a three-teacher building. What improvements would you offer to the plans shown in the chapter? What per cent. of the rural school buildings have made provisions for the proper teaching of agriculture and domestic science?

5. Do you know what would be the approximate cost of building a modern five-teacher building in your locality? Try to ascertain how much it would cost the average farmer who owns eighty acres of land to pay his share for such a building. Then try to find out what it

would cost to equip this building with everything complete and modern.

6. What additional provisions should be made in the matter of building and equipment for the teaching of agriculture? What are some of the conditions that should be considered by those selecting the school site? Discuss the matter of accepting ground from interested patrons on which to locate the building. Why should the consolidated school frequently not be located near a church?

CHAPTER XIX

HOW TO EFFECT CONSOLIDATION

All true progress grows out of consciously felt wants. The first step in effecting consolidation of schools in any community is the creation of a deep-seated desire for better rural schools. Once this is accomplished, the reform will grow of its own accord, supported by the demand of the people themselves, instead of being forced upon them from without.

Supplemental to the desire for better schools must also be the conviction that the old type of district school Factors interfering can not serve the new and better pur-
with consolidation pose demanded. For the old one-room district school has become so deeply rooted in the hearts of the people, and its unquestioning acceptance become so much a part of their mental constitution, that it will not be given up without a struggle. Indeed a majority vote is not infrequently registered against the abandonment of the old school when to every fair mind it has become clear that the school is accomplishing inferior work, and is behind the times in every particular. The combination of inherited love, blind faith and ill-founded sentiment attached to the "little red school-house" often outweighs the desire for the better advantages and increased efficiency which only the consolidated school can fully give.

Dollars versus education Again there are those who are wholly indifferent to the school and to education, whose only care is to reduce the expenditure for school support to the lowest possible limit. With them, the first, last and only question is one of cost, and the best school is the one that is cheapest. Their philosophy of life is such that they can not measure values except in terms of dollars and cents, and they have a narrow outlook even in this direction. They are the ultraconservatives, against all progress in education, and hostile to consolidation unless it can be proved a cheaper system.

And among even the less sordid of the rural-school patronage are many voters so blinded by prejudice or False virtues ascribed to district school lack of perspective that they imagine there is good rather than evil in the shortcomings and weakness of the little country school. They claim for it a kind of peculiar and superior advantage not acceded to the larger consolidated school or the town school. Its very meagerness and poverty are ascribed to it as a virtue which, in some mysterious way, is supposed to result in a better education. Exposure to all sorts of weather, trudging through rain and snow, across plowed fields or over muddy roads, and sitting in an ugly, ill-heated and poorly ventilated schoolroom are supposed to be a part of the process of making illustrious men and women!

Sentiment for the old school Then there are those who saw the little old school-house built and have watched the development of the neighborhood school. It was here that they received their own meager education, and here their children have gone to school. They regard the school as a local institution, and look

upon it with something of the feeling a college student has for his alma mater. To them it would be a real shock to see the old school abandoned. Such a catastrophe would break up the established order of things, for they have become accustomed to the school as a part of their environment, and to lose it would cause the same void as if the sun should desert the sky, or the seasons forget their procession.

Still others hold that, since the rural school has been good enough for themselves and their ancestors, it must

Failure to see that times have changed of necessity be good enough for their children. These are the ones who have not caught the spirit of the age.

They do not realize that standards have advanced, and that what served one generation may leave the next handicapped. They pride themselves on not being fadists, never realizing their own hopeless stagnation. This is one of the most difficult classes to convert, since a condition of satisfaction with one's achievements or possessions is fatal to all progress.

All such traditional notions and beliefs, and all such blindness, indifference and selfishness militate against the

Leaders misunderstood and mis-judged establishment of the consolidated school. For the consolidated school must come to serve these very ones

who are so thoroughly saturated with false ideals of education and so deeply steeped in conservatism. It is therefore no easy task that confronts the leader in education who starts a campaign for the abandonment of the district schools, and the founding in their stead of consolidated schools. For this leader is sure to encounter hostility and opposition. His judgment will be questioned, his plans misunderstood and his motives im-

pugned. To be successful, he must be sure of his ground, steadfast in his purpose, and resourceful and wise in his method.

Before attempting to consolidate the schools of a community the leaders in charge should make certain that

Conditions fundamental to consolidation

two fundamental questions can be answered in the affirmative: (1)

Will the physical conditions in the

territory concerned permit the *transportation* of pupils who live beyond easy walking distances; and (2) is it possible for the community to meet the *financial obligations* necessary for the building and equipping of the new school? It is also important to know, (3) whether the right to abandon the single-teacher schools, to levy necessary taxes, to build and equip the new school rests with district, township or county officials, or with the voters of the school units concerned.

Much time and effort are wasted, and occasionally harm done by opening a campaign for consolidation

Mistake of attempting the impossible

when the conditions are not ripe for such a movement, or when the situation demands different methods from

those employed. There are certain districts here and there that will not at present admit of consolidation. The topography may be such that transportation is out of the question, and the children would be forced to walk long distances or depend on furnishing their own conveyance. In either instance the consolidated school would operate under a severe handicap, and could not hope to be wholly successful. Bad roads are also a serious obstacle in some regions, but are not prohibitive, as roads can be and will be improved.

There are districts here and there which are not finan-

cially able through local taxation to raise the amount of money required to build and equip a good consolidated school. It is undoubtedly better for these districts to continue their local school than to attempt a consolidated school with too limited an amount of money. In states where the county, or perhaps even the township, is made the unit of taxation, such a financial handicap is seldom met. Where the state also aids the consolidated school there are few communities that can not build and equip consolidated schools without excessive taxation.

The difficulties to be met in effecting consolidation are always greater where small individual districts control their own schools. A study of the consolidation movement clearly shows that this type of school is growing most rapidly in the states where a larger unit, such as the township or county, is made the basis of school organization.

Where the law provides that each district shall vote separately on the abandoning of the local school and the County or town-levying of the tax for the new school, ship better unit the problem is greatly complicated. than local district Consequently the campaign waged must be different from what it is where the entire township or county is taken as the unit. For it is evident that where the project for consolidation must receive a majority vote in *each* of the small districts concerned, a few objectors in any *one* district may defeat the proposition for the whole proposed territory. In such a case, the campaign must be very thorough and complete throughout the entire community. No objector must be overlooked, and nothing taken for granted.

Similar problems arise in connection with arranging for the details of erecting the building and equipping it. If those who are to have this responsibility in charge are chosen by small districts, jealousies are likely to arise which may jeopardize the success of the undertaking. From every point of view, therefore, it is preferable to employ the entire area to be included in the consolidated school as the unit of organization, taxation and administration.

Consolidated schools can seldom be established without a preliminary campaign of education, agitation and

A preliminary campaign necessary inspiration. For the new is always questioned, and the old always accepted as a matter of course. The

district school is already in possession of the field, and this is decidedly in its favor. It will not be displaced by the resolutions of educational conventions, the recommendations of educational experts, or permissive laws by legislatures. Its elimination will require the massing of every influence that can be brought to bear. And all who enter upon this campaign, having once assured themselves that consolidation is feasible in their community, should enlist to serve not for a month or a year, but until victory is accomplished.

The natural leader and commander-in-chief of the campaign for consolidation is the county superintendent

County superintendent natural leader of campaign together with his district superintendents. For in the county superintendent should be found both the influence and the knowledge that are

needed. His office gives him authority, and he is in position to know the facts concerning the possibility of public transportation and the financial ability of the people to

build and support the new school. He also will understand the legal requirements to be carried out in passing over from one system to another. When the superintendent finds conditions favorable to the change, he has reason and argument all on his side, and it is only left for him to make his campaign tactfully and fearlessly.

Before beginning the active campaign, there are three groups of influences that should be earnestly and separately sought: (1) the teachers, (2) the school officials in the territory concerned, and (3) a few important and influential patrons in each of the local districts. With all three of these forces favorable, the problem is usually an easy one.

The teachers can probably do most of all to help or hinder the consolidation movement. For they are in im-

Teachers most powerful influence for consolidation mediate contact with the voters, and their judgment and advice carry weight. The wise leader will therefore seek to obtain the support and cooperation of the teacher before he launches his campaign among the voters. If trouble is taken to see that teachers fully understand consolidation, with all its problems and advantages, it is easy to obtain their enthusiastic help for the project. The opposition which teachers occasionally make to consolidation always comes from lack of information. They do not know what a consolidated school is like, nor its advantages to both pupils and teachers. Some are opposed to giving up the district school because they fear that with the new school will come higher standards, more exacting supervision, or perhaps even loss of position because a smaller number of teachers might be required. Others may oppose a change because

they are now permitted in connection with the little district school to carry on some remunerative occupation while teaching, and they fear this will be impossible under new conditions.

Teachers, therefore, need to be instructed and convinced with reference to consolidation. This can often be accomplished by having a part of the county institute and convention programs given over to discussions of consolidation. The county superintendent can here urge the cause, and analyze the local conditions demanding a change. Speakers can be brought in who have had experience in effecting consolidation, and who know its difficulties and advantages. In one southern county almost all the teachers were against consolidation until a superintendent who had successfully consolidated the schools of his county in another state had been brought before the teachers with facts, figures and lantern slides to show them what the movement actually means. At the end of a week, hardly a teacher was left who was not an ardent advocate of the new type of school. In another county the teachers were against consolidation because they had been told that only about one-half the number of teachers needed under the district system would be required in the consolidated schools. When they were shown that Montgomery County, Indiana, the most completely consolidated county in the United States, is now employing one hundred and sixty-four rural teachers as against one hundred and forty-nine under the old system, their opposition disappeared. Until it is proved to them, they do not understand that the great increase in attendance and the addition of high-school grades will fully compensate for the closing of the smaller schools.

Not infrequently the better and more influential teach-

ers, when they come fully to understand the advantages of teaching in a consolidated school, are willing to give up their places in district schools and go to the consolidated school for a lower salary, if need be. The satisfaction of being able to do both themselves and the pupils full justice means more than the convenience of the near-by small school, or any other selfish consideration.

Teachers enthusiastic once they understand consolidation

One of the best teachers in a western consolidated school was offered eighty dollars a month to teach a district school in an adjoining township. He was receiving but sixty-five dollars a month in the consolidated school, so he decided to look the ground over. But when he saw the poor building, the scanty equipment and the overcrowded program of the little school, he reported to his would-be employer that he would not exchange schools at double the salary. So he returned to his old position, satisfied with the lower salary and better conditions.

A typical instance occurring in a western state illustrates the influence of strong teachers in the matter of consolidation. A young teacher went to a district school in a community where consolidation had been agitated but had failed. Nearly every adult was opposed to consolidation, and especially to the transportation of children. This young woman taught so good a school, and secured such a hold on the community that a petition was circulated and signed by every parent asking for her return a second year. But she heartily thanked the patrons for their cooperation, and explained that she could not return. She told them she had been offered a position in an adjoining consolidated school and, as her heart was in

The good teacher easily makes converts

this movement, had decided to accept the place. The sequel was that the patrons of the district school came to realize the handicap under which their school was laboring, and before the next school year opened had carried a proposition to abandon their district school and transport the children to the consolidated school where their favorite teacher had gone.

A personal canvass and an appeal for the support of a few local leaders of prominence and intelligence is usually all that is necessary to secure the help of leaders their cooperation, provided the advantages of the new school are made clear to them, and they are convinced of the feasibility of the transportation system and the ability of the district to finance the proposition. Sometimes the school officers are opposed to the change. Then it is necessary to bring to bear all the persuasion of the teachers and influential neighbors to overcome this handicap.

When the actual campaign among the voters begins, and ordinarily there must be a campaign that carries the

Arguments to be used in the campaign matter to every voter in the district, certain lines of argument need to be emphasized: Many are afraid of the

cost; yet it can be shown that, if the consolidated school be content with the advantages offered in the district school, the new system would usually cost less than the old. Economy is not, however, the reason for consolidating schools; the chief argument for consolidation is *efficiency*. It can be shown that, just as the cost of a modern reaper over the old cradle and rake is a paying investment, so is the cost of a first-class, well-equipped, consolidated school over the small one-room school. It can also be made clear that the one-room schools can not be

built and maintained so cheaply now as in former years; and that the compulsory education laws which are requiring so many children to be kept in school are also compelling school authorities to provide better buildings, more equipment, higher class teachers, a more liberal curriculum and improved sanitary conditions. Any of these new demands is sufficient within itself to justify the giving up of the old district school for the consolidated school. The rural teacher is already overworked with classes and the number of different subjects taught. He has been losing some of the very best pupils to the city and the town schools because of the fact that these pupils could not afford to remain in the home school where the teacher could find time to give them but little help or attention. Others have dropped out of school altogether with the belief that they can get more practical help from other sources than it is possible for them to receive in the inefficient district schools. Still others are leaving these schools year after year for the simple reason that they have found in them too many inexperienced and unprepared teachers. All these things are not theory, but every-day occurrences. The one-room schools are no longer attracting and holding the larger boys and girls. Neither are they attracting or holding the better and more experienced teachers.

A questionnaire was recently sent to several county superintendents in different states for the purpose of ascertaining whether these counties

Fundamental weaknesses in district school were able to keep their experienced teachers in the one-room schools, and whether the one-room schools were able to attract and hold a fair proportion of their boys and girls, especially

the larger ones. The answers to these questions were almost unanimously in the negative.

With reference to the teachers, three of the leading county superintendents of Indiana, located in different parts of the state, gave the following data: Superintendent John F. Hains, of Hamilton County, reported that 39 per cent. of his district teachers at that time were beginners and that 42 per cent. of the remaining 61 per cent. were teaching with less than three years' experience. At the same time in the consolidated and city schools of that county, but 3 per cent. of all the teachers were beginners, and only 9 per cent. were teaching with less than three years' experience. Superintendent Richard Park, of Sullivan County, reported that 38 per cent. of his district teachers were teaching their first school, and that only a little over 20 per cent. were teaching with three or more years' experience. In his consolidated, town and city schools, but 7 per cent. were teaching as beginners, and only 12 per cent. with less than three years' experience. Superintendent Jesse C. Webb, of Johnson County, reported that 27 per cent. of his one-room teachers were beginners, and that less than 25 per cent. of them were teaching with three or more years of experience. In this county only 5 per cent. of the teachers in the consolidated, town and city schools were teaching as beginners and but 18 per cent. with less than three years of experience. When the fact is considered that the foregoing figures for the consolidated, town and city schools include not only the elementary, but the high-school teachers as well, it becomes even more convincing. For the high schools, in order to secure college and university graduates, must take a larger number of beginners than they otherwise

would. Aside from this they lose a larger per cent. of their teachers to the commercial and professional fields than do the rural schools.

In like manner it has been shown by recent studies that the one-room school can not compete with the consolidated school in attracting and holding its pupils. The results of an investigation made in Montgomery County, Indiana, may be taken as a fair illustration, since this county has but few one-room schools left, and all these are larger and stronger than the average district school. In addition, a special effort has been made for the last several years to keep as many experienced teachers in the district schools as possible. These schools have had, also, the stimulus from near-by consolidated schools, which has a tendency to make them better and more efficient. In spite of such favorable conditions, the small schools, at the time of this investigation, were enrolling but twenty-seven per cent. of the children over fourteen years of age who had not completed the elementary work. And only ten and four-tenths per cent. of those from this territory who were eligible for high school were enrolled. The consolidated schools in the same territory were enrolling seventy-one per cent. of the children over fourteen who had not finished the common school, and sixty-three and eight-tenths per cent. of those from the consolidated territory who were eligible for the high school were enrolled either in the high school of the home school or elsewhere. The reason for this great difference can be made clear enough to school officers and patrons.

The one-room school is not only unable to attract and hold a reasonable proportion of the pupils for the com-

pletion of the elementary course, but it fails to give to those who do remain the ambition to look ahead for further education in the high school.

One-room school does not lead to more education And even if the boys and girls who complete the district school desire a high-school education, comparatively few can attain one unless the high school is brought to them as a part of the consolidated school. These facts and these illustrations are given to indicate the type of information that has been successfully used in various campaigns for consolidation.

There is no end to the different arguments, ways and means for convincing patrons and voters that the consolidated school promises more for the upbuilding of the community and the improving of farm life than any other agency. But no two communities are just alike in local conditions, and hence it is impossible to lay down any complete and definite program that will apply to all localities. In some districts it is necessary to dwell chiefly on the financial side of the two types of schools. In other localities, the advantages offered by the new school as a social center make the stronger appeal. And in still others, the superior equipment, stronger teaching force and better curriculum are the convincing arguments. The leaders of the campaign must be sympathetic students of local problems, and adjust their plans accordingly.

The help of local papers should be enlisted whenever possible. Articles bearing on the desirability of better rural schools, accounts of improved conditions in near-by schools, and suggestions as to the advantages of consolidated schools are of great help. Especially after

consolidation has begun can the press be influential in stimulating local pride and emulation.

"Booster" meetings should be held when the right stage of the campaign is reached, and every influence brought **Value of public meetings** to bear to insure the attendance of the indifferent and the opponents of the movement. In this connection, lantern slides of model consolidated schools and their achievements have a powerful influence. Addresses should be made, facts presented, and a free, open and honest discussion of all sides of the question encouraged. All personal feeling, jealousy and bitterness should be laid aside, and the good of the entire community patriotically and fearlessly considered. Teachers, as well as superintendents and patrons, should attend these meetings and take an active and intelligent part therein.

With one well-located consolidated school adequately furnished and equipped, provided with a satisfactory

Important influence of the first consolidated school transportation system, and given a corps of efficient teachers working under a good superintendent, the battle is well won. For success is a powerful stimulus. Emulation is sure to follow. One such school in any county, plus the local support sure to come from its teachers and patrons, will do more to convert the remainder of the county to consolidation than all other factors combined. The leaders must start out with this in mind. No mistake must be made with the first consolidated school; for one failure may delay the movement for years to come. The site must be chosen wisely, the building be suitable, the transportation satisfactory, and the teachers carefully selected.

Especially should the superintendent of the new school

Importance of selecting right superintendent be thoroughly capable and adapted to his work. For he confronts a difficult and delicate task in combining a number of different small schools, each with its own traditions and standards, into one unified system. He will have to grade the school, classify the pupils and attend to many other difficult matters of organization. On him will fall much of the responsibility for insuring safe and satisfactory conditions in the school hacks. It will be his problem to convert any objectors left in the community, and in all ways take the lead in proving the wisdom of changing from the old to the new.

FOR TEACHERS' DISCUSSION AND STUDY

1. Why is the creation of a desire for better rural schools one of the first steps necessary in order to obtain consolidation? In what three ways can this desire be created in the average rural district? What step should next be taken?

2. Would a full knowledge of the three conditions given on page two hundred and ninety-four enable you to decide whether or not your own community should be urged to ask for a consolidated school? How would you proceed to satisfy yourself as to these facts?

3. Why is it better for a district that is not financially able to build and equip a good consolidated school to continue school in the old district buildings? Do you think it is possible for almost any community to have a good consolidated school (where consolidation is advisable) if the larger unit for financing rural schools could be generally adopted? Why is the larger unit better for administrative purposes as well as financial purposes?

4. If conditions were reversed and it were necessary to abandon the consolidated schools in order to establish the old district system, do you think your patrons would be in favor of the change? How many of your patrons really know the advantages of the consolidated schools? How many of them have ever visited a good consolidated school? How many of your fellow teachers have ever visited this kind of a school? Do you see any reasonable argument in the statement that a teacher can teach a better school where she has from fifteen to twenty pupils in seven or eight grades than where she has from twenty to twenty-five in two grades?

5. Why should the county or district superintendent take the lead in a movement like consolidation? When, if at all, should these officials be urged to remain silent on the question? In some counties the teachers are given most credit for bringing about the consolidated school. Name and discuss at least three things that must have been accomplished by these teachers in order to merit this credit.

6. How can local newspapers best help to advance this movement? How would you gain the cooperation of these newspapers? If you should decide to take the editors of the papers out to see the actual work being done in the rural schools, just where would you take them? Make an itinerary for a trip of this kind. Would you invite any patrons or school officials to accompany you on this trip? Why?

CHAPTER XX

THE TRANSPORTATION OF PUPILS

The success of consolidation depends more largely on efficient and satisfactory transportation than on any other single factor. Rural homes are so far apart, and the average family so small, that in order to justify consolidation, pupils must be gathered from a territory too large to admit of any considerable number walking. This means that a large majority of the children must be carried to and from school at public expense. For, not only is it unfair to those who chance to live farthest from the school to require them to furnish their own conveyance, but no system of private conveyances has ever proved successful. Nor can it prove successful. There are too many chances that accident, sickness or rush of work will interfere with taking the children to school. Attendance is bound to be irregular, and tardiness and absence the rule rather than the exception where the district is not responsible for the system of transportation.

There are many whose only argument against the consolidated school is based upon objections growing out of transportation, and in many instances it is not difficult to find room for just complaints. But investigation will show that the causes for such complaints are never inherent in the system itself, but are due to maladministration.

Success of consolidation dependent on public transportation

Public distrust of transportation not well founded



The way the old district school sends its pupils home



One of the best types of school hacks

tion. Like all other branches of public service, the transportation of school children falls short of success when left in the hands of incompetent and untrustworthy individuals. Because a driver now and then keeps the children in an uncomfortable and poorly ventilated wagon until ill results follow does not prove that the school wagon is a menace to good health. To argue to such a conclusion is like saying that the loss of more than two hundred children in the Collinwood school disaster proved that all school buildings are death-traps. Practically all just complaints against transportation arise from incompetency or carelessness which could easily have been guarded against by school officials. Recently the lives of a score of pupils were jeopardized by a driver who was addicted to drink, and whose route crossed the railroad track. The fault here lay not in the system, but in derelict officials who would employ such a man as driver, and allow him to continue after his dereliction was known. The fact that one state last year spent half a million dollars for the transportation of school children without a single serious accident is proof of the safety of the system.

In any discussion of transportation four all-important factors are to be considered. These are: (1) the length
Four important factors of the route, (2) the character of the roads, (3) the means of conveyance, and (4) the character and efficiency of the driver.

The matter of determining the routes for the several wagons of a new consolidated school is at once difficult
Difficulty of mapping routes and delicate. The moment one begins to map out these routes a number of perplexing questions are confronted. The wagon must be well filled, no child is to be missed, bad roads must be

avoided, and no one route should exceed six miles over good roads, or five miles over unfavorable roads. To sit at one's desk with a county or township map before him and settle all these questions may seem a slight task. But to go in person over the proposed routes and decide where the wagons shall make their first and last stops, and which roads shall be traveled, are matters requiring much wisdom, tact and capacity for fairness.

One of the most troublesome questions before route makers and wagon drivers is that of dealing with families who live at a considerable distance from the main road. In some localities there are so many homes situated in the center of farms or down muddy lanes that, should the school routes be so planned as to go directly to all these homes, each driver would be obliged to travel some ten or fifteen miles in order to fill his wagon. And this would mean that the children he received first would have to be carried an unreasonable distance and would be in the wagon too long a time. More than one school official has received complaint against transportation, and upon investigation has found that certain persuasive parents had influenced the driver to alter or enlarge his route by driving down lanes or by-roads which were not, and should not be, a part of the route. All favoritism of this sort, or any other violation of the driver's instructions must be rigidly forbidden. Where carelessness or lack of courage on the part of school boards prevents the carrying out of this fundamental condition, the success of the system is sure to be endangered.

The introduction of transportation not infrequently bears one ill result. It seldom fails to make all walking
Unreasonable on the part of school children undesirable and exceedingly irksome.

Children who cheerfully walked two miles to the old district school consider it a great hardship to walk a half, a quarter, or even an eighth of a mile to reach the school wagon; and it often happens that the severest critics of consolidation are parents whose children are expected to walk from their homes to the main road, a distance rarely exceeding a quarter of a mile.

In one such instance a ten-year-old girl was asked to meet the school wagon at the crossroads just a quarter of a mile from her home. The parents objected, but the route was already too long and the officials ignored the objection, not only because it would have added another half-mile to call for this girl, but also because it would necessitate turning the heavily loaded wagon around in a narrow and treacherous spot. The parents refused to abide by the decision of the officials and appealed the case to the county superintendent. In their argument before the superintendent they held that it was not only unfair to expect their daughter to walk down this lane, but that it was dangerous owing to the occasional passing of cattle and other live stock. This was the first year of the new consolidated school, and the complainants were asked how their daughter had been getting to the old district school, which was nearly a mile away. They admitted that she had walked and that she had traversed this lane. The walking had not proved burdensome or dangerous prior to the introduction of transportation.

Great importance attaches to the length of the route. While much depends on the character of the roads and
The length of the route the weight of the vehicle, it may safely be said that no school wagon drawn by horses should be expected to cover a route ex-

ceeding six miles in length—a maximum ride of twelve miles a day for those children who live at the extreme end of the route. The legislature of Indiana, however, has repeatedly refused to pass a bill limiting the school-wagon routes to six miles, and this is the state which leads in the number of school wagons used, and the per cent. of pupils transported. During the 1911 session of the Indiana legislature, a bill making six miles the maximum length of transportation routes received the support of scores of leading school men, but in spite of this, the bill was defeated; and, strange as it may seem, those who most strongly opposed the bill were the voters whose children were being transported. This last and most persistent attempt to limit by law the length of school routes in this state brought out the fact that there are instances where children are being carried seven miles or farther, to the complete satisfaction of their parents. It furthermore showed that the length of routes should be determined altogether by local conditions.

The unexpected growth and success of free rural-mail service in the United States has demonstrated that, when

Good roads a factor in length of route they are really wanted, good country roads can be had in nearly every section of the country. Statistics show

that more miles of good all-the-year-around roads have been built during the last fifteen years than during any fifty years previously. In numerous localities, good roads have been built for the express purpose of securing the advantages of the daily mail. And it is reasonable to say that if a state or community is willing to improve roads in order to secure free daily mail, the same state or community should be no less willing to improve more

roads in order to get free transportation for school children.

The importance of good roads to the success of consolidation can not be over-estimated. It is well known that in many of our states there are miles upon miles of country roads which become so bad in winter and early spring that two horses can do no more than draw an empty wagon over them. To effect any system of transportation over these roads is next thing to impossible. And in some states, hills, swamps and running streams make road building a very costly enterprise. For this reason consolidation can not be given a fair trial in such localities. And, as already pointed out, the character of the roads goes far toward determining the length of routes and the number of pupils to be carried in each wagon in districts where consolidation is firmly established.

But it is not too much to believe that excellent roads will soon permeate every prosperous and progressive rural community. This fact should not be lost sight of by those who are considering the question of transportation in connection with the consolidation of rural schools. Farmers are realizing that it is false economy either to allow their roads to go unimproved, or to experiment in the matter of road building. And no one is more cognizant of the fact than they, that too much money has been extravagantly wasted on the average country road.

Within the last few years, however, most of the states have taken long strides in the building of country roads.

Efficient and responsible road super-visors and county engineers are rap-

idly displacing the indifferent and busy farmers, who have too often regarded the building of roads as an easy opportunity to pay a good portion of their taxes by working without plan or skill upon the roads when farm work is slack. Poor and inadequate grading is giving way to excellent roadbeds, and these beds are being covered, not with sand and dirt from the nearest pit, but with the best grade of gravel, crushed stone or pavement. Additional money is being appropriated from state treasuries, and this fund is being increased in many states by the income derived from automobile licenses. One state has recently reported the receipt of more than four hundred thousand dollars for the current year from this source alone, and all of the fund is to be used on the roads of that state. In many sections of the country individual communities have bonded themselves to the extreme limit for the purpose of improving their roads in addition to what the state is doing for them. It is evident, therefore, that within the early future but few districts should need to deprive themselves of transportation on account of poor roads.

Until within the last two or three years, wagons or carriages drawn by horses have been almost exclusively **The automobile as a means of transportation** used in conveying children to and from the consolidated school. But the time is fast approaching when motor-cars will supplant horses in this sphere just as they have done in the matter of street-cars. These new and swifter vehicles have already been tried in certain localities. Mr. T. H. Gass, a driver for the Alamo consolidated school near Crawfordsville, Indiana, used a motor-car during the school year of 1912-1913 with complete success. His route was almost five miles in length and there were



The bad road



Changing bad roads into good is one of the best means of promoting rural education

seventeen children to be carried. While the roads were in good condition the trip was made in thirty minutes; this is to say that one-half hour was the maximum time any pupil would be in the car. With still further improvements in the manufacture of motor-cars and better country roads, it will be possible to transport children in less than half the time now required.

Any wagon or car used to convey school children should have adequate room and good ventilation. The

Qualifications required of any conveyance seats should be adjusted to the height and comfort of the pupils carried.

The wagon should be heated by some form of hidden furnace or heater, and never by an oil or coal stove. There is on the market now a very satisfactory small heater made expressly for school wagons. It is neatly fitted under the bed of the wagon, and the heat is distributed by means of pipes and registers. It burns wood, coal or coke, and is absolutely fire-proof, being so constructed that if a wagon were to upset and turn completely over, no fire could get out of the fire box. There are still other methods for heating the wagons, and no excuse exists for permitting children to suffer with cold while being conveyed to school, or for endangering their lives by fire in case of accident.

It seems unnecessary to say that school wagons and cars should not be left out-of-doors over night or when

The care of school wagons not in use. But, because they are ordinarily the property of the state, county or township, they are often exposed and misused in various ways. Drivers should be required to provide adequate shelter for these vehicles. A complaint was made during a recent school term against a certain wagon on the ground that it was nearly always damp and cold

when the children entered it. Upon investigation it was learned that the wagon was being left out-of-doors day and night, no matter what the weather.

All vehicles for the transportation of school children should be purchased and owned by the school corporation

School wagons to be owned by the corporation **in which they are to be used.** This is true, *first*, because it is obvious that should these vehicles be

owned by individuals, the school corporation would be limited in the selection of the drivers; and, *secondly*, because public ownership of the vehicles makes for superiority and uniformity. Dissatisfaction is sure to follow when inferior vehicles are used day after day. It may be somewhat of a treat for the children to change from their regular wagon to a sled for a trip or two when a beautiful snow covers the roads, and in northern latitudes the sled may have to be called into requisition. But no cheap or inferior method of transportation can be depended on. Certain specifications should be made and followed in the selection of any school vehicle. In order to protect the roads it should have broad wheels. It should be comfortable and safe for the smallest and largest child. It should be perfectly strong, yet light enough in weight to enable as much speed as possible. It should be well lighted, well ventilated, and easy to mount and dismount. Several wagon factories are now making a specialty of standard school wagons.

The driver of any vehicle carrying school children should be chosen with as much care as the teacher or superintendent. For he is not only entrusted with the health and in some degree with the morals of the children he conveys, but also with their very lives.

In every case this driver should be a mature person,

Qualifications of the driver preferably a father or mother. One school trustee states that the best driver his township has had during the nine years the wagon has been in use, is a widowed mother whose own children are among the pupils she carries. This mother was strong both physically and morally, and all the children not only obeyed her, but loved her. And this trustee further says that the poorest driver he has had was a young man who at first gave every promise of making an excellent guardian for the children on his route. But he was unable to control the children and they came to dislike him to such an extent that they would go to great lengths to annoy and harass him. Like many teachers, this young man did not understand childhood. His many threats and promises augmented trouble instead of abating it. The patrons finally became so disturbed that they demanded his resignation.

Important, then, as these things are, the ability properly to drive a team and to look after the physical safety of the children are not the only qualifications drivers must possess. If such were the case it would be far less difficult to secure first-class drivers than it is. The question of moral influence plays one of the most important parts in the transporting of school children. The man who conveys pupils to and from school should be as clean and wholesome as the teacher who instructs them during school hours. Children are imitators always, and will be influenced by their driver as quickly and naturally as by their teacher. It is universally agreed that no man who uses intoxicating liquors should be employed as a driver. It should likewise be agreed that no man whose habits or standards are unworthy of imitation should be

numbered among those who transport pupils to and from schools.

In those communities where transportation has been in operation for some time there has been comparatively little difficulty in securing desirable drivers. The average daily wage paid each driver for himself and team has been upward of two dollars, which amount has proved sufficient to lead from four to ten men to apply for every position. This has not only given officials great latitude in the selection of men, but it has also served as a powerful stimulus in causing the men chosen to do their best. There are a few officials who ask for competitive bids, and then give the positions to the men offering to do the work for the least money. But this method tends inevitably to lower the standard of service rendered, and can not be too severely condemned.

Every occupation has its own temptations. One of the temptations which comes oftenest and most easily to drivers of school wagons, is the temptation to alter their time tables. For example, Richard Roe, driver for a certain school, is given a time table which stipulates just when he is expected to arrive at each home where there are pupils to be carried to school. This table has been prepared with great care. It provides ample time between stops, and is designed to get the pupils to school about ten minutes before the last bell. All goes well for several weeks. But presently something tempts Richard Roe to deviate just a little from schedule time. Perchance it is a piece of work on the farm that needs his attention. He asks the children along the route to be ready fifteen minutes early to-morrow. The children are nothing loath to escape the

The driver and his schedule

chores and arrive at school in time for a period of play before lesson time. Hearing no special protest, Richard Roe concludes that it will be to his advantage to start on his route twenty or thirty minutes early once a week or oftener. It is not long until complaint is heard, and the complaint is just. When a time table has been prepared and proved workable and satisfactory for any particular route, it should be considered sufficient cause for the discharge of the driver who alters it for selfish or unwarranted reasons.

The following transportation schedules actually in use in two different Indiana consolidated schools may be considered typical:

CONSOLIDATED SCHOOL NO. 1

Situated in a Region Where the Roads Are Well Improved, Consisting Chiefly of Gravel and Crushed Rock.

No. of Stop	DRIVER No. 1		DRIVER No. 2		DRIVER No. 3		DRIVER No. 4		DRIVER No. 5	
	No. Children Rec'd.	Time of Stop	No. Children Rec'd.	Time of Stop	No. Children Rec'd.	Time of Stop	No. Children Rec'd.	Time of Stop	No. Children Rec'd.	Time of Stop
1	One	7:30	Three	7:15	Two	7:30	Two	7:20	One	7:30
2	Three	7:35	Two	7:25	Two	7:35	One	7:30	One	7:35
3	One	7:40	One	7:30	Three	7:40	One	7:35	Four	7:45
4	One	7:50	Two	7:35	Two	7:45	Two	7:40	Two	7:50
5	Two	7:55	One	7:40	Four	7:55	One	7:45	Two	7:55
6	Three	8:00	Two	7:55	One	8:00	Three	7:50	Three	8:00
7	Two	8:05	One	8:00	Two	8:10	Four	8:00	One	8:05
8	Two	8:10	Three	8:05	Four	8:20	Two	8:05	Four	8:10
9	Four	8:15	Two	8:10	Two	8:25	Two	8:10	Two	8:15
10	Two	8:20	Two	8:15	One	8:30	One	8:15	Three	8:20
11	One	8:25	Four	8:25	.....	8:45	One	8:20	One	8:25
12	.....	8:35	One	8:30	.....	.....	One	8:25	.....	8:40
13	.....	.....	.....	8:45	.....	.....	One	8:30	.....	.....
14	.....	.....	.....	.....	.....	.....	Two	8:35	.....	.....
15	.....	.....	.....	.....	.....	.....	.....	8:40	.....	.....
Total	22		24		23		24		24	

CONSOLIDATED SCHOOL NO. 2

Situated in a Region Where the Roads Are Mostly Unimproved,
with Dirt Surface.

No. of Stop	DRIVER No. 1 Time on Road 105 Minutes		DRIVER No. 2 Time on Road 85 Minutes		DRIVER No. 3 Time on Road 100 Minutes	
	No. Children Received	Time of Stop	No. Children Received	Time of Stop	No. Children Received	Time of Stop
1	Two	7:00	Six	7:15	Three	7:00
2	Two	7:10	Two	7:20	Three	7:15
3	Three	7:20	Four	7:30	Three	7:25
4	Four	7:30	Three	7:40	Two	7:30
5	Five	7:40	Three	7:50	One	7:40
6	Two	7:45	Two	8:00	One	7:45
7	Three	7:55	One	8:10	Four	7:55
8	One	8:05	One	8:20	One	8:00
9	Two	8:20	.....	8:40	Two	8:05
10	.....	8:45	.....	.....	One	8:10
11	.....	.....	.....	.....	.....	8:15
12	.....	.....	.....	.....	.....	8:40
Total	24		22		21	

It should be noted that in the columns headed "Time of Stop" the last items indicate the time of arrival at the school buildings.

The following contract and bond are typical of those being entered into between school corporations and wagon Driver's contract and bond drivers. It can not be too strongly urged that a legal contract secured by a bond of reasonable amount be required in every case where the district employs drivers for the transportation of pupils:

THIS CONTRACT This day entered into by and between School Trustee of Township County, of the first part and , as driver of a school wagon herein known as party of the second part, of County, State of ; WITNESSETH:

That the party of the first part has this day employed the party of the second part at the sum of \$..... per day, to drive the school wagon on the route known herein as Number and which route is more particularly described as follows, to-wit:

Beginning at the home of
which home shall be known herein as stop Number One,
and thence
.....
.....
.....
and arriving at school between and A. M.

And said second party hereby agrees to drive said route, and transport all the children of school age who now reside in the homes on the route designated, or those children who may move into homes along and adjacent to said route during the school term.

The party of the second part agrees to use every care and precaution in the way of protecting the children transported as aforesaid, and to maintain order and discipline at all times, and to treat said children kindly and impartially, and those children who refuse to obey shall be reported by the second party to the first party, who on proper assurance of their continued disobedience, shall have the power, and it shall be his duty, to exclude them from further advantage or admittance to said wagon.

The second party further agrees that he shall at all times while driving said route come to a full stop at each point where children are taken into the wagon or let out, and he shall also come to a full stop before crossing any steam or electric railway, and ascertain positively whether there is any danger, and he agrees to avoid all danger in case danger is recognized, if possible.

And the second party at no time during the school term shall allow the wagon under his control to stand out in the storm or cold, and shall keep the same clean, comfortable, warm and properly ventilated, at all times while in use for the children.

And second party agrees to abstain absolutely from the use of tobacco and intoxicating liquors in any form, and prevent others from using them about the wagon while children are therein; and he further agrees to perform personally all duties as laid down in this agreement, unless permission for a substitute be given by the party of the first part, who shall designate who such substitute shall be.

And the party of the second part hereby agrees to make all reports called for by the party of the first part, or by those authorized by the party of the first part who call for them, and also agrees to wash and clean up said wagon at the end of the school term, and place it in the school barn or elsewhere as directed by the trustee of said township without any extra compensation.

The second party further agrees that no other use shall be made of the school wagon above mentioned without permission of the party of the first part, and the same shall be well cared for and protected at all times by the second party as far as possible.

Any violation on the part of the second party of any of the provisions of this contract shall be sufficient cause for declaring it forfeited by the party of the first part, and the party of the second part shall be responsible on his bond executed in connection herewith for such violation.

WITNESS our hands and seals this day of
.....

.....
Party of the First Part.

.....
Party of the Second Part.

CONTRACTOR'S BOND

KNOW ALL MEN BY THESE PRESENTS That I, as principal and as surety are hereby firmly bound by these presents to.....

.....

of Township,
County, in the penal sum of \$.....
for the payment of which we jointly and severally bind
ourselves, our heirs, executors and administrators.

Sealed this day of, 19....

The condition of the above obligation is that the said
above has been employed as
driver of the school wagon on School Route Number
..... in Township,
..... County,
during the school year of 19... and 19...

Now if the said shall
faithfully and impartially discharge his duties as provided
in the contract of employment in connection herewith,
and in accordance with all the terms and conditions
thereof, then this bond shall be null and void, otherwise
to be and remain in full force and effect in law.

.....
.....
.....
.....
.....
.....

Approved by me this day of,
1913.

.....

FOR TEACHERS' DISCUSSION AND STUDY

1. What are four important factors in connection
with the transportation of school children? In your
judgment which is the most important, the condition of
the roads, the means of conveyance, or the driver?
Give reasons for your answer.

2. What are some of the most common complaints
made against the school wagon? Do you think these
complaints should be charged against the system itself
or against the way in which the system is managed?
Call on some patron of a school wagon and ask for his
objection or criticisms against his local school wagons.

3. In your judgment what should be the length of a route covered by a team-drawn school wagon in your community? Try to learn what is the distance being covered by the wagons nearest you. Then try to find out if any of the drivers leave the main highways for the purpose of accommodating certain pupils. Do you feel that any local official should plan a route which would make it necessary for a wagon filled with children to be carried off the main road to pick up one or two children?

4. Approximately how many miles of roads have been built or improved in your immediate community during the last five years? Are your roads now favorable or unfavorable to the successful operation of the school wagon? How many weeks or months during each year could they be made favorable for the transportation of school children by the expenditure of a reasonable amount of money on them? Who has charge of your road repair work? Do you think a local method of road-working by land owners and voters is a satisfactory one?

5. Are any motor-cars used for the transportation of school children in your part of the country? Can you see any reason why this speedier and more comfortable method should not displace the present wagon method if the roads are made suitable? From available figures as to the cost of the wagon method in your community, try to ascertain whether or not the motor-car would be the cheaper, taking into consideration the original cost, repairs and the number of children transported. How many children are your drivers trying to carry in the wagon?

6. What should be some of the qualifications of a school-wagon driver? Should the school corporation or the driver furnish the vehicle? Give reasons for your answer. If a team is used, who should own it? Why do so many drivers persist in reaching the school building too early? Supposing that three-fourths of your pupils were being transported to and from school, what

time in the morning would you prefer that these children should arrive? Do you think too many rural children try to reach the school building too long before the day's work begins?

PART V

RURAL SCHOOL ADMINISTRATION

CHAPTER XXI

THE SUPERVISION OF RURAL SCHOOLS

No system of schools can run successfully without adequate supervision. It matters not how skilful the teaching, how excellent the equipment, or how perfect the curriculum, there must be over it all some competent authority to unify and direct. Left without necessary supervision the schools are like a complex factory system possessing a supply of material and a full quota of workers, but lacking overseers and foremen to direct the operations. Such a system of manufacture would result in great waste, and would end in financial disaster.

This point is well illustrated in a recent statement made by State Superintendent Hamlett of Kentucky:

Waste from lack of supervision "Kentucky is spending annually the enormous sum of over three million dollars for rural education, practically without supervision. Here are nine thousand four hundred and eighty-one rural teachers in the service of the state; one thousand four hundred and forty-one of whom are beginners, and each one conducting his school in his own way. Fifty-two cents out of every dollar of state taxes go to public education; the school fund has increased over one million dollars in eight years; the salaries of rural teachers have increased until they average forty-eight dollars and sixty cents per month or two dollars and

ten cents larger than the average of salaries of city teachers; and yet, in spite of the heavy tax on the people and the large increase in teachers' salaries, the rural schools are falling farther and farther behind as compared to city schools. What is the cause? Clearly one of the causes, if not the chief one, is a lack of competent direction or supervision of the rural schools." This condition of affairs is not peculiar to Kentucky, however, but is typical in too large a degree of the rural schools in most of the states.

Rural schools especially should not be left without skilful supervision. For here the problems are the most

Rural schools especially need supervision difficult to be met in the whole school system, the teachers are the youngest both in years and experience, and have had the least preparation and training for their work. The rural teachers, therefore, need and have a right to the help that comes from the sympathetic oversight of a competent supervisor whose knowledge and experience enable him to guide and direct the young teacher in meeting his many perplexing problems.

Yet the rural schools have never been given supervision worthy the name. In the earlier days of our history the minister often had added to his clerical duties as a sort of side-line the task of inspecting the school and examining the fitness of the teacher. But with the divorcement of the church and public education, this custom lapsed. The care of the schools was then not infrequently attached to the duties of some public officer who already had duties enough to occupy all his time and interest. Finally, the office of county superintendent was created, and forty-one of the forty-eight states have now adopted the office. It is understood in every state that the special

function of the county superintendent is to oversee the work of the rural schools, special superintendents being employed for the towns and cities.

The office of county superintendent may therefore be looked on as typical of our attempt to supervise rural

County superintendent and supervision education. This office has played an important part in the development of our educational system, and its thousands of incumbents have on the whole been efficient and deeply devoted to their work. But the office imposes an impossible task on the superintendent. For, while the county is probably the most convenient unit for school organization and administration, it is far too large for successful supervision under one officer.

Counties vary greatly in size in different parts of the country, running from ten or fifteen miles square in some of the eastern states, to more than one hundred miles in certain western states. The average county in the greater part of the country is not far from twenty-five miles square, having therefore an area of some six hundred square miles. In better settled regions such counties have from one hundred and twenty-five to one hundred and fifty rural schools, and not infrequently as many as two hundred. Together with town and village schools, the county superintendent often has from two hundred to three hundred teachers under his nominal supervision, or as many as would supply a city of forty thousand people.

It is, of course, perfectly evident that no personal supervision can be had over the rural schools under such **Too great a territory to cover** conditions as these. If the county superintendent should visit one rural school every day that the schools are in session,

he would barely be able to call upon each school once a year. This is equivalent to no supervision at all, since he can be of no direct help to the teacher in meeting his daily problems. And even if we grant that a whole day need not be spent in each school visited, we yet have to allow for many factors that make it impossible for the county superintendent to visit schools constantly while they are in session.

For the county superintendent is greatly handicapped by the fact that he is expected to keep up the routine of **Lack of clerical** his office, and often without adequate help; **many duties** clerical help. He usually has to care for a large correspondence, and is required to keep many records and make extensive reports. He must keep open office and meet the school patrons of his county on certain days set apart for this purpose. He must give frequent examinations for certificates and, in states where the state does not take charge of the grading of manuscripts, must spend days and weeks on the reading of papers. He is generally commissioned with the duty of passing on the plans of all new buildings or extensive repairs for schoolhouses, and not infrequently must help select the text-books for the use of the schools and the school libraries. The county superintendent is constituted a court for the hearing of appeals on school cases. He must have charge of the enforcement of the school laws in his county, must attend educational conventions, and prepare and carry out programs for teachers' and patrons' meetings. It is plain that when these and many other duties not enumerated have been attended to, the time for visiting and supervising schools is greatly curtailed. A fair example of the actual amount of supervision rendered is the fact that in North Carolina the average time annually spent

by the county superintendent in each rural school in 1910-11 was one hour and fifty-four minutes; in Tennessee, the time averaged one hour and fifty minutes. In Georgia and Florida during the same year, the county superintendent averaged one and two-tenths visits to the school.¹ The record in other states is not far different.

But the effectiveness of supervision by the county superintendent is still further handicapped by another factor—the inadequate pay, with frequent lack of provision for traveling expenses incurred in visiting schools. In order to travel over a county where trolley lines are yet wanting, the county superintendent must keep some conveyance of his own or else hire. This means additional expense, and a heavy drain on a meager salary. It is financially more profitable for the county superintendent to remain in his office than to visit his schools; in other words, a tax is put on supervision by failing to provide for the legitimate expenses incurred while traveling among the schools. The outcome of all this is that the rural schools are often not visited by the county superintendent for several terms at a time, nor the teachers met except at normal institutes or other teachers' conventions.

The salary of county superintendents has never been commensurate with the responsibilities and opportunities of the office. The county superintendent is usually paid a lower salary than the merely clerical officers of the county, such as the county treasurer, clerk or auditor. Yet these require but a rudimentary education, and no special judgment or

¹ See Monahan in *Bulletin Number five hundred and fifteen, United States Bureau of Education.*

skill, while the county superintendent should possess an education equal to that of any educator in the public school system, and should in addition have the highest type of administrative ability and special training for his work.

While the supervision of the rural schools of a county is vastly more difficult than the supervision of the schools of a city employing an equal number of teachers, yet the pay of the county superintendent is rarely more than half as much, and frequently less than a third as much as is paid the city superintendent. This factor militates, of course, against the office of county superintendent, since the tendency of the stronger and better prepared men is to seek the city superintendencies rather than the county superintendency. In some of the states the effect of this discrimination is seen in the fact that men are no longer seeking the office of county superintendent, and the places are being filled by women. In Iowa, for example, sixty out of ninety-nine county superintendents are women, and the proportion is increasing. It is beyond question that many of the strongest and most efficient county superintendents in the country are women, yet the tendency to eliminate men from the office probably tends on the whole to weaken it.

The method of selecting the county superintendent in twenty-eight of the forty-one states having this mode of supervision is by popular election, thus making the office purely political. The evils growing out of this system are one of the greatest obstacles in the way of proper rural-school supervision. In Maryland, Louisiana, North Carolina, Georgia and Iowa the county superintendents are appointed by county boards of education; in Tennessee

see by the court; in Indiana and Pennsylvania by school trustees or directors; in Delaware by the governor; and in New Jersey by the state commission of education.

Length of term too short The length of term is short, only two years in twenty-two states, three years in two states and four years in fourteen states. This, coupled with the uncertainty of reelection makes the initiation and carrying out of any extensive plans or policies practically impossible. It also constantly puts the county superintendent under the temptation to shape his activities so as to placate public opinion. In hundreds, if not thousands, of counties the office is subject to the unwritten political rule of "two terms and out." Such a system deprives the county superintendent of one of the greatest incentives to progressive endeavor, since, no matter how successful his work, the rotation of the political wheel is sure to drop him out to make way for a successor. Not only do such irrational conditions hamper the occupant of the office after his election, but they serve to deter desirable candidates from seeking it.

While, however, the county superintendency suffers under so many handicaps, it has great possibilities, and

Office should be freed from limitations will no doubt continue to be the central office in the supervision of our rural schools. The great problem, therefore, is to free the office from its limitations, and strengthen it for the great tasks that lie before it in the reconstruction of the rural schools. The salaries should be increased in all the states, and very greatly increased in many of them. Several southern states pay the county superintendent but a few hundred dollars a year, while one western state by constitutional enactment limits the

salary to seventy-five dollars a month, or less than is received by teachers in ordinary school positions in the state. And even Indiana, with all its boasted improvement in rural education, pays a maximum salary of about fourteen hundred dollars to the county superintendent, with a minimum as low as eight hundred dollars. In this state the allowance for clerical work is only about thirty dollars a month, thus greatly hampering the superintendent with duties other than those of supervision. It is not uncommon for superintendents to spend annually as much as two hundred dollars of their own salary in traveling expenses and office service that they may the better supervise their schools. School patrons and taxpayers need to be brought to see the short-sighted economy that will allow millions of dollars of school funds to be expended under such imperfect conditions of supervision as these facts suggest.

The conditions under which the county superintendent is chosen also need to be changed. In this country where politics is both a diversion and a business it is difficult to remove any public office wholly from politics. But it is a crime against the youth in our schools to make this educational office a political plaything, and subject to the exigencies of political fortunes. That we are willing to do so betrays a failure to look on education in a wholly serious light. There is no more reason why the county superintendency should be voted on at a political election, or the nominations be made in party primaries or caucuses than the city superintendency. The fruits of this method are seen in the fact that in a recent election in an important state, several of the county superintendents elected had never been engaged in school work at all, being small business men or workmen. In several in-

stances also, the candidates elected were unable to obtain a teacher's certificate such as that held by the majority of teachers of their county.

In order to escape such a travesty on supervision, the plan is being developed in about a dozen states at present **Appointment by non-partisan board** of having the county superintendent appointed by a non-partisan county board, thus removing the office as far as possible from politics. Under this system, the board is not limited to candidates from its own county, but may seek the best material wherever it is to be found. Such a board will retain a successful officer for an indefinite period, and free him from the worry and uncertainty of political elections; and they also find it possible to dismiss an incompetent official without waiting for the expiration of the customary two terms. The advantages of this system of election are too obvious to require discussion.

With higher salaries, a more rational method of selection, and more secure tenure of service, the qualifications

Qualifications for the office to be advanced of the county superintendent will naturally be advanced. Under the conditions of the past it has been impossible to insist on as high an average of preparation for this office as for the city superintendencies. In general, the requirements at present are but slightly higher than for teaching in the rural schools, and in many states, no higher. In but twenty-seven of the forty-one states employing county superintendents is any educational preparation required for eligibility to election. Only seventeen require experience in teaching. Fourteen states require no educational qualification whatever, though of course many of the county superintendents in these states are, notwithstanding, well qualified.

The county superintendent should be well trained scholastically and professionally, and should have had extensive experience in educational work. He should be the real leader of his teachers and the school patrons in all that pertains to culture and education. He should be a person of broad and quick sympathies and deep insight, with a great capacity for loyal friendships, and the ability to offer helpful constructive criticism.

But above all, the county superintendent should be in sympathy with rural life and a leader in its activities.

Sympathy with country life Under the growing ideals for rural schools, it is almost necessary that he shall have had practical experience in agriculture, and also be thoroughly grounded in its scientific foundations. He needs to understand manual training, and the principles of domestic science, and be able to organize and correlate the work in these new subjects with the remainder of the curriculum. He *must deeply believe in country life, and in farming as a desirable career*, and thus be able to attract young people to the farm instead of leading them away from it.

In short, in far the larger part of the country, the county superintendency occupies the strategic position in

Opportunities ahead of the county superintendent the reorganization of the rural schools. The influence of this office is paramount, and as it succeeds or fails, so will the movement for country-life

education succeed or fail. That this statement is true is abundantly shown by the results attained in certain counties, and the educational lethargy prevailing in others possessing similar advantages to begin with. Not a few county superintendents have become national in their

fame for the work done in the rural schools of an ordinary agricultural county. Men from a dozen states have come to visit their schools and discover the secret of their success. And this secret, when found, always consists in a clear ideal of the function of the rural school as the most valuable possession of the rural community, coupled with the vision, devotion and capacity necessary to realize this ideal in practise. Stating the same truth differently, wherever there is found a region of rural schools far surpassing those of surrounding regions, there it is safe to inquire who are the county superintendents responsible for this excellence and progress.

But even with the conditions surrounding the office of the county superintendent remedied, there still remains

County superintendent must be given assistants the necessity of supplying a sufficient number of deputies or assistants. Instead of receiving a visit of supervision annually, the rural schools should be visited every few weeks, or even every few days if necessary, by a skilful supervisor who knows how to assist the teacher in solving the difficult problems that are sure to arise.

This movement has already begun in many places. But West Virginia has done more toward perfecting it than any other state. State Superintendent W. P. Shawkey and his rural school supervisor, L. J. Hanifan, have been giving special attention to this phase of rural education and their splendid work along this line is attracting the attention of educators from far and near. In many states this movement is known as "The West Virginia Plan of Rural Supervision," and it seeks to give county superintendents a sufficient number of district superintendents to make it only necessary for each one of these district supervisors to have from twenty to fifty teachers

under his jurisdiction. In this way, frequent and helpful visits can be made to each teacher throughout the school year. The states of Oregon, Kentucky, North Dakota, Indiana, Pennsylvania and many of the southern states are now organizing a similar system. County rural supervisors as assistants to county superintendents began work in more than one hundred counties in southern states in 1912. Another form of assistance given the county superintendent is that of special supervisors appointed to oversee the teaching of certain lines of work in all the schools of the county, or as many townships as may be assigned. This plan is so far limited chiefly to the southern states, where it is meeting with excellent success. Virginia, South Carolina, Georgia, Alabama, Mississippi and Louisiana all employ such supervisors in certain counties, and the movement is spreading.

One of the most interesting of recent attempts to add this type of supervision is in the states of Louisiana and

**Beginnings of
industrial
supervision**

Georgia. The plan was initiated by private philanthropy, and taken over by the school authorities when it had proved its success. The project is described by its founder as follows:¹

"In the summer of 1909 consent was obtained of the superintendent and school board of Putnam county, Georgia, to accept an industrial teacher for the rural elementary schools of the county. The teacher came in September. She was thoroughly experienced in country teaching, familiar with cooking, sewing, and home-keeping; had managed successfully a small but first-class farm; was modest, tactful, and industrious; but owned no diploma. She was placed under the direction of the

¹ Bulletin Number four hundred and eighty-two, *United States Bureau of Education*, page seven.

superintendent, but with the understanding that she should manage for herself, he lending such assistance as he could. The plan was to visit the schools in succession, spending some days in each district on the first round. At the beginning the industrial teacher was taken around and introduced by the superintendent. She became acquainted with the individual teachers and the pupils, talked to the girls about sewing and cooking; to the boys about shopwork, a garden, cleaning up, and improvements to house and grounds. She helped with the teaching, talked clubs, library, and wherever possible arranged for some domestic science. She was invited to the homes, took a hand in the kitchen, talked crops and stock to the farmers, and chickens, vegetables and flowers to the mother. This was repeated on following visits. Soon canning clubs and school improvement clubs were organized; meetings were held; a library fund was started; 'socials' and suppers were given to raise money and get together; a new schoolhouse was projected; a longer school term considered; and more homes were visited. There was usually a cordial response; if not on the first visit, then at the next. It was not long before this teacher was very much in demand, freely sent for, and entertained. She was not an instructor, but a visitor, adviser, and leader.

"The plan proved acceptable and has needed no changes. The superintendent and board regarded it as

Success of the plan an important addition to the schools. Cooking and sewing were started in many places, an additional tax was voted, the teachers were helped. Perhaps the most important was the awakening of social interest and the inter-

course with the families at home. For the second year the boys' and girls' clubs were organized to make a joint exhibit at the county fair, with a liberal prize list. In one consolidated school a full shop and kitchen were installed, money was raised by subscription for additional room, and an industrial teacher employed. Social gatherings and public meetings became common, the school-house became the social center. Doing things became fashionable. For the third year the board unanimously took over the teacher and assumed the salary, which includes the very small expenses.

"Before the end of the first year applications had been received from other counties. Three additional teachers, **Growth of industrial supervision** of qualifications about similar to the first, were added. One of these was placed in Putnam county, one in Oconee, one in Douglas, and the first teacher went to Greene. The same course was followed in the new counties with the same results. The superintendents were exceedingly helpful, gracious, and approving. For the third year, Morgan, Jones and Hancock counties were supplied, a number of applications being still on the waiting list. The original teacher was made supervisor, to visit and help the others. There have been two gatherings of all the teachers and some of the superintendents to become acquainted and compare notes. No change in the plan has been suggested. There are no rules; no statistical reports are required, but there is much correspondence. The teachers are furnished free to the counties for two years, after which the county assumes the charge."

The new projects now under way in rural education make some form of closer supervision almost imperative.

Agriculture is a required subject in the rural schools of about twenty states, and will soon spread to most of the

New subjects make closer supervision necessary others. Manual training and domestic science are but a step behind.

These subjects are new, and the teachers are less well prepared in them than in the older subjects. Suitable text-books are not available in all the new lines, and the course of study to be followed in presenting them is not fully agreed on. Further, the new branches must be adjusted to the remainder of the curriculum. These are all difficult and delicate problems, and the teacher must have help in solving them, else much of their value will be lost and our promising attempt at progress will fail.

It is true that consolidation of the rural schools will greatly help in solving the problem of supervision. For there will be fewer schools to visit, and the principals of the consolidated schools will be able to render assistance to their teachers. Yet, at its best, the task of supervising the schools of an entire county will remain gigantic, and the office of county superintendent will require the highest and most efficient type of educational ability available.

The state superintendent is also an important factor in the supervision of rural schools. In the past, the greater

The state superintendent an important factor in supervision part of his influence has been felt through the medium of the county superintendents, whom he has counseled, and whose work he has in some degree directed. Through his influence courses of study have been adopted, the requirements for teachers have been shaped and unified, and legislation favorable to rural education has been pro-

moted. During recent years, however, a large number of the states have provided for deputies under the state superintendent whose special duty has been the general supervision of the rural education of the state.

These rural supervisors are doing a remarkable work, especially in certain of the southern states. During the **Special state supervisors** last year the states of South Carolina and Mississippi have sent their rural supervisors, W. K. Tate and W. H. Smith, respectively, to Denmark and other foreign countries for the purpose of preparing them to do still more for the rural schools in their states. In some states, a supervisor of industrial training has also been added. These officers have been an important factor in stimulating the interest in rural education and in shaping and guiding the direction of rural school reforms.

Taken altogether, therefore, the signs are very hopeful in the field of rural-school supervision. We have the

Hopeful outlook for rural supervision fundamental agencies at hand to render effective service. The county will remain the unit of supervision for the greater part of the country. The office of county superintendent will increase in importance and in responsibility. The necessary assistants will be supplied to provide personal supervision for every rural teacher, and to unify the work of the schools of the county. The state superintendent, through his relations to the county superintendents and through his special rural-school supervisors, will be able to stimulate and unify the work of the rural schools of the whole state. The opportunities and duties of the supervisors of the rural schools are perfectly definite and clear. There are men and women of the required training and ability to fill acceptably those su-

pervisory positions. It only remains for us to surround the supervisory offices by such conditions, and support them with such social and financial rewards, that the highest type of ability and devotion can be claimed for these most important of all educational positions.

FOR TEACHERS' DISCUSSION AND STUDY

1. How often does the county superintendent visit your schools? How much real help are such infrequent visits? Do you often meet problems on which you would like advice from the superintendent?
2. Compare the work of a county superintendent and a city superintendent. Compare the salaries. Do you think there are any more important responsibilities required of a city superintendent than of a county superintendent? How do you account for the difference in salaries?
3. Compare the educational requirements of the two positions. Why should one be in politics any more than the other? Why should one be required to work twelve months out of the year for less salary than the one who works but nine or ten?
4. Are the rural teachers less deserving of efficient supervision than are town or city teachers, bearing in mind that the former usually have two or three times the number of grades to teach?
5. Compare the number of beginning teachers in your rural districts or township with the number of beginning teachers in your towns or cities. Why do the rural teachers prefer to work in graded schools? Do not the town and city teachers put in as many hours per day? Does not the average teacher prefer to work where she can have the advantage of closer supervision? Is it not a fact that rural teachers would rather have their

superintendent visit them several times each month than once or twice each year?

6. Why do rural teachers change schools so much more frequently than do urban teachers? Does not the lack of adequate and efficient supervision account for this to a great extent?

7. Do not one or two insignificant and groundless complaints from a patron often cost a good rural teacher her position? Would these same complaints have any weight with a city or county superintendent who has visited this teacher every week or month throughout the school year?

CHAPTER XXII

FINANCIAL SUPPORT

The surest test of the loyalty and appreciation attaching to any institution is the willingness to pay for its **Willingness to pay** advantages. Granting the necessary **a test of ap-** financial ability, therefore, the measure of support accorded to the rural **preciation** schools indicates the esteem in which they are held by their patrons, and the value attached to the education these schools represent. The rural schools originated in the pioneer days when poverty and privation were the common experience of those who dared to claim the new regions. The school shared in the general poverty, as was right it should, and was perforce satisfied with its meager equipment, which was on a par with other standards of the day.

But the pioneer days are gone, and the farmers have become the most prosperous and well-to-do of our industrial groups. They constitute a class of high intelligence, and control one of the most fundamental and important of all occupations. Their wealth has increased until the amount invested in agriculture is more than twice that devoted to manufactures. During the present generation the value of farm holdings has more than doubled, and the tendency is still upward. The present reign of prosperity has favored the farmer more than any other class of workers.

Has the rural school shared in the general advance in prosperity that has reached the farms? Taking the country as a whole the expenditures for public education have more than doubled during the last decade. This is a marvelous advance, probably never before equaled in the history of any country. Has the rural school received its share of added support, or is it still on the basis of the pioneer days when rigid economy was the price of bare existence?

While the rural schools have reaped some benefit from the great advance in wealth and prosperity, they have

**The rural school
has not shared
prosperity** not received their full share. In buildings, equipment and salary they are still too near the old level. Towns

and cities have erected commodious and attractive buildings, and supplied them with the necessary material and apparatus for efficient work. But, excepting for the occasional country school, the rural schools are yet stranded dangerously near the poverty line. Log schoolhouses are common in the South, and are still to be found in use in such northern states as Indiana and Illinois. At least five thousand primitive log buildings are in use for rural-school purposes. Colorado employs more than three hundred sod, adobe or log school buildings, with other equipment to match. An actual survey of all the rural schools for whites in twenty-eight counties of eight southern states recently showed that fully half of the fifteen hundred and seventy-nine schools were being held in old, weather-beaten buildings, a large proportion of which had never been painted, and a considerable number of which had never been ceiled—mere shells of cabins. Thirty per cent. of these schools used home-made desks similar to

Annual expenditure per child of school age for school purposes in each state in 1910. —Courtesy of Russell Sage Foundation.

those found in the colonial schools buildings of two hundred and fifty years ago, and twenty-seven schools reported no desks of any kind, but only rude benches for seats. A similar survey in from one to three counties in each of seven northern states revealed conditions no whit better, if the difference in economic conditions is considered. The latter report concludes that in these northern states the buildings are for the most part old and out of date—one room, low ceilings, dingy and dark. The grounds are bleak and bare of beauty or attractiveness and, like the buildings, poorly kept.¹

Even town and village schoolhouses, to say nothing of city buildings, are now warmed by steam or circulating currents of heated air, are thoroughly ventilated and have provisions for sanitary drinking fountains and other hygienic equipment. But more than half of the country schools of all the states are yet heated by an unprotected stove set in the middle of the room, radiating its heat directly on the pupils. One out of eight of all rural schools is entirely innocent of shades for the windows, the sun finding unhindered access to the room. Less than one school out of twelve has any janitor service provided except that given by the overworked teacher; hence cleaning days are few and far between. Three-fourths of the rural schools of the entire country are without water supply on the premises, while about one out of five has no water within a quarter of a mile. The common drinking cup and the old wooden or rusty tin water pail are still in common use. Half the outhouses are an insult to decency and a menace to morals.

¹ See *Bulletin Number five hundred and fifteen, United States Bureau of Education*, page thirty-one.

FINANCIAL SUPPORT

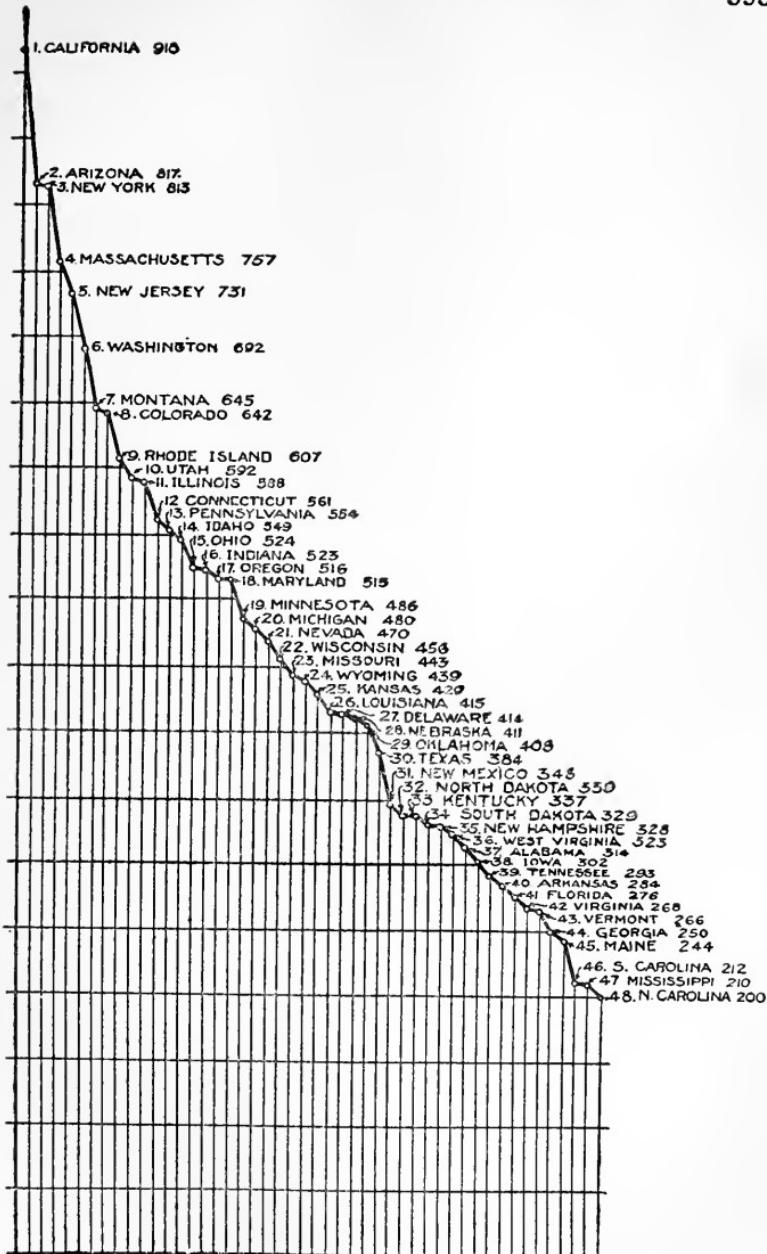
351

Cost of one day's schooling per child in each state in 1910. Each black dot represents one cent. —Courtesy of Russell Sage Foundation.

On the whole, we are obliged to conclude that the great majority of rural schools are housed in uncomfortable **Unsuitable equipment** and unsuitable buildings, unadapted for school purposes from almost every standpoint, without proper furniture, and lacking in facilities for heating, ventilating and lighting; further, that the rural schools are without adequate provisions for guarding the health and morals of the children, and possess very little equipment for teaching. And this is the treatment we accord some six million American boys and girls when we send them to school! Is it any wonder that many of them are not enthusiastic over their opportunities, or the type of life to which such conditions are related!

Rural schools are supported little or no better in the matter of current expenditure than in equipment. The **Salaries too low** salaries of rural teachers are too low in most states to demand or obtain efficiency. Coffman found in a recent study¹ of more than five thousand rural teachers scattered over various states, that the average man teaching in the rural schools receives a salary of barely three hundred and ninety dollars a year, and the average woman of three hundred and sixty-six dollars a year. Men teaching in towns and cities receive about double the salary of those teaching in the country, and women slightly under twice as much. While it is difficult to get accurate data on general wages, the best figures available from government reports indicate that the average annual wages received by the workers in five great occupations are as follows: Carpenters, eight hundred and two dollars; coal miners, six hundred dollars; factory workers, five hundred and fifty dollars;

¹ *The Social Composition of the Teaching Force.*



Average annual salary of all public school-teachers in each state in 1910.
—Courtesy of Russell Sage Foundation.

common laborers, five hundred and thirteen dollars; all *public school teachers, four hundred and eighty-five dollars.*

It is evident from these comparisons that teaching as an occupation is greatly underpaid; but the rural teacher **Humiliating comparisons** suffers most of all. Throughout the southern states there are thousands of rural teachers who earn less than one hundred and fifty dollars a year. And even in New England, hundreds of rural teachers receive less than six dollars a week. One central Atlantic county averages only one hundred and twenty-nine dollars a year for all teachers in the county. One southern state lets its convicts from the penitentiary to contractors at the rate of four hundred dollars a year, while at the same time the pay of its teachers is only about three hundred dollars a year. Another state succeeds in maintaining all its country schools at an average of two hundred and eighty-six dollars a year for all expenses.

Of course this all represents too low an expenditure for any reasonable standard of efficiency. Teachers can **Efficiency dependent on salary** not afford to spend money in special preparation for such a return as their salary nets them. The amount they receive is less than a living wage, and leaves no margin for expenditure in the line of greater efficiency. Yet out of this meager amount they are obliged to pay for a certificate, attend teachers' meetings and conventions, perhaps subscribe for a professional journal, buy a few books, and otherwise keep up with the times.

But it is useless to expect the impossible. It would be unfair to expect efficiency on any such basis as we have described, for something can not be had for nothing in

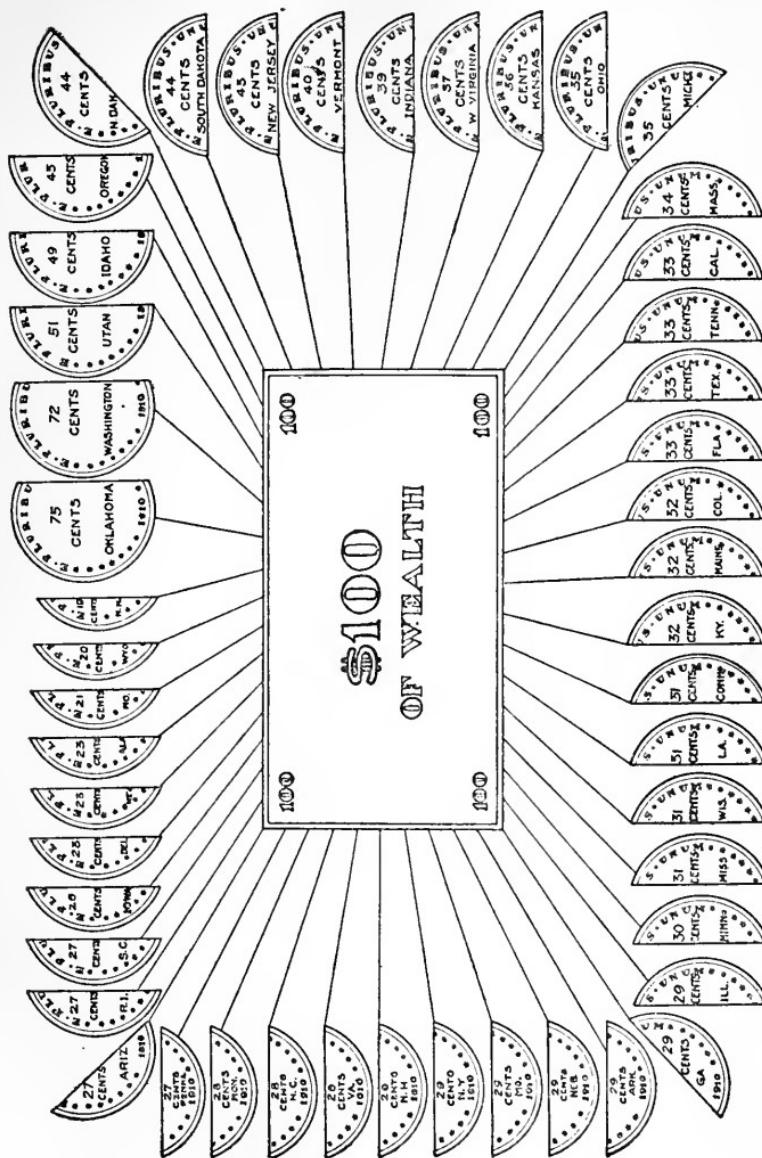
education any more than in business. One can not sow parsimony and reap success. One of the results of this niggardly policy with reference to rural education is appalling, though not generally realized: that in spite of the unfavorable conditions in our cities, *illiteracy in rural territory is twice as great as in urban territory.*¹ This is in spite of the fact that thousands of illiterate immigrants are crowded in the great industrial and manufacturing centers. Illiteracy among children born of native parentage is more than three times as great as among the children born in this country of foreign parentage, largely on account of the lack of educational opportunities in rural America, where comparatively few immigrants live. The fact is that the people of rural America have been so busily employed in taming the rich prairies, garnering harvests from the alluvial plains, and building fortunes from the fruits of their own industry that they have neglected the education of their children.

All this would be discouraging indeed were it not for the fact that many indications are now pointing to **Signs of improvement** marked improvement in rural-school conditions. The movement toward consolidation has already been referred to. New buildings in large numbers are under construction in many states, and are, as a rule, of a far better type than those they displace. Better grounds, equipment and accommodations are becoming the rule. Legislation is being effected requiring that the plans for all new school buildings must be approved by competent educational authority before the building is erected. State aid, where given

¹ See *Bulletin Number five hundred and fifteen, United States Bureau of Education*, page ten.

to rural schools, is given on the condition that certain requirements shall be met in respect to the type of building and its equipment. Salaries are also increasing. A number of states have passed laws fixing the minimum salary at which teachers may be employed, and establishing that minimum considerably higher than it averages at present. This will all help, but much yet needs to be accomplished. People are at best slow to move toward reform, and especially is this true when the change requires greater expenditure of money. But more money is the first requisite for the betterment of the rural schools, and no great advance can be made until this increased support is available.

It is true that only a certain just proportion of a community's wealth can go into education. For there are the **Economic basis** farms to improve, the homes to build, **not lacking** the machinery to buy, and many other things to accomplish, which require the expenditure of money. Yet it may well be doubted whether the farmer is at present putting even a fair proportion of his wealth into his children's schooling. Certain it is that as a nation we are not bankrupting ourselves in what we spend on public education, and the farmer least of all. It has been carefully estimated that we annually expend between two and three times as much for tobacco as for public education, and at least five times as much for liquor. In Iowa the egg crop pays for the current expense of the public schools, both urban and rural. Similar illustrations might be used to show that it is not poverty, but indifference, that explains the lack of financial support of schools in every state. The proportion of aggregate wealth spent annually on public education runs all the



Amount expended for schools for each \$100 wealth (estimated total valuation of all real and personal property) in each state in 1910.

—Courtesy of Russell Sage Foundation.

way from seventy-five cents for every hundred dollars' worth of property in Oklahoma, and seventy-two cents for every hundred dollars' worth in Washington, down to twenty cents in Wyoming, and nineteen cents in New Hampshire. In spite of all the progress that has been made, it is probable that a considerably smaller proportion of the wealth of our people is going into education than was the case fifty or one hundred years ago. And this is especially true of the farming population.

Averaging the country through, about seventy-two per cent. of the school revenue is derived from local taxes,

Methods of levying school tax levied on the property of the district. The proportion from this source ranges all the way from ninety-seven per cent. in Massachusetts to twenty-seven per cent. in Georgia. The remainder is practically all received from state taxation and the interest on permanent school funds.

It is fully evident that, with the schools dependent for almost three-fourths of their revenue on local taxation voted by the people themselves, the financial status of the rural schools is dependent on local pride and interest in education. It is, of course, to be kept in mind that the property basis for taxation in rural districts is very different from that in towns and cities. Farm values are not piled up in small areas like city values, hence the same territory can not supply an equal amount of school tax. Rural property can and should, however, pay *as high a rate* of school tax for the same school privileges as town and city property. Yet it does not pay so high a rate in any state, and the rate is much lower in most states.

The approximate difference in the local school-tax rate in urban and rural districts is shown in the following

instances cited in a recent work; such instances might be indefinitely duplicated from other states:¹

"In Kansas, the local school tax paid in 1910 was above eighty per cent. more than that paid by country districts.

Local taxation In Missouri the current report of the state superintendent shows towns and cities seventy-five per cent. higher than the country. In Minnesota, towns and cities average nearly three times the rate paid by rural districts. In Ohio, towns and cities are more than ten per cent. higher than rural districts, even where the rural districts maintain a full elementary and high-school course. In Nebraska and Iowa the town and city rate is fully double that of the country districts." The discrepancy is still further increased by the fact that the rural property is in general not assessed at as near its actual value as the tangible property of towns and cities.

Of course the rural school-tax rate should not be so high as that of towns and cities when the latter are re-

Farmers able to pay for schools ceiving the advantages of fully organized elementary and high schools, and the former only of elementary schools of doubtful efficiency. But the point is, that the rural property in most sections of the country affords an adequate basis for much better financial support of the rural schools if its owners are only willing to pay as freely for the education of their children as is done by the urban residents.

Educational advantages would be very greatly equalized and rural education in general much better supported if

Larger taxing unit desirable the method of levying school tax should be changed to make the county instead of the individual district the unit. This

¹ Betts, *New Ideals in Rural Schools*, page forty-four.

would in a sense pool the burden of support, giving the children of the less favored communities equal opportunities with those living in more wealthy regions. Because of the unequal distribution of natural wealth, such as soil, mines, factories, location for cities, etc., this plan is wholly fair and just. It will never be possible under a local district system of taxation to make educational opportunities in any considerable degree equal. The presence of a railway running through one district and paying a heavy tax into the school treasury may allow excellent school privileges at a low personal tax rate, while an adjoining district may be condemned to a poor and inefficient school even while paying a high rate. But let the taxes be levied equally on the property of an entire county, and such inequalities will in large degree be eliminated.¹

An extension of this idea has been carried out in a number of states by granting state aid to such schools as

State aid to schools will meet certain prescribed conditions as to the organization of their schools, the type of building and equipment, the studies taught, and the preparation of the teachers. Massachusetts began this policy many years ago, and it has since been developed in different forms in various states. State aid is now given for the *consolidation* of schools, for the organization of *high schools*, for the *training of teachers* in special courses in high schools, for the teaching of certain *industrial branches* in the schools, and for maintaining certain *standards of work* as shown by examinations given pupils in the schools.

The method of levying and distributing school taxes

¹ See Cubberly, *The Improvement of Rural Schools*, Chapter Two.

has, therefore, a very direct relation to the financial support of rural education. The most desirable taxation system would probably be a system that makes the county the basis of local tax levy, with a supplementary state tax paid equally to all schools of the county on condition that the local boards meet certain stipulated requirements. Added to this may be state aid for the carrying out of some special line of education vital to the interests and welfare of the state.

No system of taxing machinery alone will solve the problem of better support of the rural schools, however.

Taxes depend on public sentiment For our taxes are, after all, finally voted by the people or their representatives. And only as the patrons of the rural school are aroused to the necessity for better education for their children, and to the possibilities inherent in the rural school will more money be forthcoming for school support. Many are indifferent to the advantages of education, and still look on it rather as an accomplishment than a necessity. They want their children to be able to read and write, but their ideal of education goes little beyond this. Others believe in a general way in education, but do not realize how meager and inefficient is the training offered by the average rural school. They have slight basis for comparing the advantages of different schools, or else rather helplessly look on the type of education given town children as beyond what they can afford for their own. Still others contend in a blind sort of way that the rural school is now offering excellent opportunities for education, not a few asserting that the district school is far ahead of the town school in what it can do for its pupils. Finally, there are those who frankly and defiantly object to any plan or project that will cost the

'district additional expense, and measure all values by this one criterion. These are the ones who seek the teacher willing to accept the lowest salary, who oppose improvements in building or equipment, and whose first question concerning any new plan is whether it will result in greater expense.

What the rural community needs more than anything else is *an educational revival that will touch the pocket*. Need of an educational revival books, causing the taxpayers to see in the school an opportunity for financial investment, and also an opportunity to pay the debt that society owes to the children. Good schools yield an abundant return in dollars and cents, but this is not the only reason they should be well supported; they also pay as great returns in largeness of life, happiness and efficiency. And it is good for a community to conceive its school in this light as well as in the other.

The rural schools require better financial support; there is abundant wealth to supply this support. The problem is to make this need clear to those who control the purse-strings, to convince them that money spent on education is well invested, and finally to arrange our tax machinery better so as to equalize the financial burden of supporting the schools.

FOR TEACHERS' DISCUSSION AND STUDY

1. What reasons lie back of the fact that the rural schools have lagged so far behind the town schools in financial support? Are the farmers as well able to pay a reasonable tax rate as city people?
2. School-tax rates in towns and cities usually average from two to three times as high as in the country. Com-

pare the rates for a township in your county. (The assessor or county auditor can supply rate.)

3. Make a somewhat detailed comparison of all lines of recent improvement in town and rural schools of your county. Also compare school interest and loyalty. How do you account for the difference? What needs to be done?

4. What has been the trend in salaries in your county recently? Is it fair to demand better preparation of teachers if salaries are to be raised, or are present standards high enough?

5. Where does your state rank (according to the chart shown in the chapter) in the proportion of its total wealth going into education? Do you think the people should be taught to *want* to spend more for education?

6. Can you state the argument for and against a county versus a township basis for school taxation? For a large proportion of state tax going to support schools? (See Cubberly as cited in chapter.)

CHAPTER XXIII

THE CARE OF BUILDINGS AND GROUNDS

New methods must obtain in providing for the care of rural-school buildings and grounds. Three factors have arisen that render this imperative: **change of methods** (1) The increased burden and responsibility thrust on the teacher by the addition of new subjects to the curriculum and the demand for higher standards of teaching; (2) the growing insistence for improved hygienic conditions in the school, which entails much additional work in the care of the building; (3) the larger size of the rural-school buildings and the greater amount of equipment demanding care and attention.

From time immemorial a part of the rural teacher's duties have been to serve as school janitor. In early New England this custom extended to village schools also, and not infrequently the schoolmaster had not only the care of the schoolhouse, but of the church as well. That there might be no question that he fully earned his salary, the task of digging the village graves was often added to his responsibilities. But with the passing of the pioneer days, the town and city teachers have escaped the demands of manual labor about the buildings. Such work has been handed over to janitors employed especially for this service.

But this is not the case in rural schools. More than ninety per cent. of the rural teachers of the United States

are still expected to do all the janitor work required by the school, and in most cases without extra compensation **Rural teachers and** therefor. This is to say that the **janitor service** rural community has not yet come to look on teaching as skilled labor, much less as a professional occupation, since a considerable portion of the time for which the teacher is employed is required in the simplest kind of manual work.

The rural teacher should not be required *nor allowed* to perform the janitor service for any school. This is not a question of the teacher being above the manual work involved; there is nothing degrading in the mere fact of sweeping and dusting a room and starting a fire. The question is rather one of business and professional expediency. Can the district afford to have the teacher devote time and energy to such employment, and can the teacher afford to spend his time and energy in such a manner?

It is a very serious problem that the rural teacher of the present confronts in making daily preparation for his work. In the district schools he is attempting to teach twenty-five or more recitations a day. These classes embrace almost the whole scope of the elementary curriculum and deal with children of all ages from five or six years up to fifteen or eighteen. In the old-time school, the teacher who was prepared in arithmetic, reading, writing and perhaps geography, had covered the range required of him. Preparation for the day's work, therefore, included only these few branches. There were no nature study, agriculture and domestic-science lessons to plan. Literature, history, art and music demanded none of his attention. Corn clubs, canning clubs and school gardens made no inroads on his time. There were no scientific

experiments to prepare, no home projects to supervise, and no language themes to correct or examination papers to grade.

The rural teacher of to-day has all these demands on his time and strength. The burden is already far too **Whole of teacher's** great, and much heavier than we ask **time and energy** of teachers in any other section of our **belong to teaching** school system. The rural teacher should therefore have thrust on him no outside duties that will take his time, distract his attention, endanger his health, or in any way lower his energy; for the problems of *teaching* require every resource of mind and body. It is a short-sighted policy and a false view of economy that permit a school board to devote any part of the teacher's time to such work as sweeping, dusting and the care of the room. For these things can be done equally well by less expensive labor.

The time that thousands of rural teachers are required to spend each morning in building the fire and getting the

Time required for room ready for the day's work is one **preparation or** of the best hours of the day for the **recreation** study and planning of lessons. This

time should be devoted to preparing for higher efficiency in teaching—to reviewing for the recitation, to outlining new projects of work, to professional reading and thought. When the teacher arrives at the building in the morning he should find it well heated, cleaned and aired, and all in readiness for beginning the day. He should have no more direct responsibility for the care of the schoolroom than has the town teacher. To violate this simple and obvious business principle shows an out-of-date and narrow policy that ill matches the progressive spirit now ruling in commercial and industrial affairs.

The teacher needs all the time that is free from the actual school-day and preparation for the succeeding day's work in healthful exercise and recreation out-of-doors. The hour, more or less, demanded for the daily care of the schoolroom is of necessity stolen from study, reading and recuperation. The custom, prevalent in many communities, of paying the teacher a slight sum additional to the regular salary for doing the janitor work can not be too strongly condemned; nor should any teacher enter into such an arrangement. Where the board is willing to pay for the janitor service, the work should be done by some person other than the teacher.

Careful statistical studies have shown beyond question that teaching is one of the most unhealthful occupations,

**Teaching an un-
healthful occupa-
tion at best** and is highly exhausting to the general health and vitality. Not a little of this difficulty comes from the long hours spent in a dusty and ill-kept room, usually in an atmosphere breathed many times over, and not infrequently shared by those who have communicable diseases. The dangers are clearly increased by requiring the teacher to sweep and dust the schoolroom where he has already received more dust and germs into his lungs than his vitality can withstand. There is little doubt that the appallingly high tuberculosis rate prevalent among teachers is in part due to the practise of requiring janitor service of most of our rural teachers.

The widespread movement toward a higher standard of public hygiene vastly increases the work involved in caring for the schoolroom. The old system of washing the floor once a year, sweeping once or twice a week and dusting hardly at all will no

**Better hygienic
standards require
additional janitor
service**

longer serve. Not only an enlightened public sentiment, but legislative enactment is insisting that more attention be given to insuring cleanliness and hygienic conditions under which to carry on the school. Probably not less than three or four times the labor formerly expended on the care of the school buildings and equipment is coming to be demanded under the newer standards. This is to say, the rural teacher who keeps his school a model of hygienic cleanliness must greatly add to his already excessive burden, if he is to continue to serve as a janitor.

The increased size of modern rural-school buildings, the addition of basements, cloak-rooms, and toilet rooms **Modern buildings** still further complicates the problem **demand more care** of janitor service. Not only must the frequency of sweeping be greatly multiplied, but the amount of floor space to be swept has been doubled or trebled. Not only has it been decreed that windows must be washed more often, but the amount of window space now demanded is greater. Not only are we coming to insist that blackboards, erasers and chalk troughs shall be kept free from dust, but we are employing eight or ten times the amount of blackboard space formerly used.

The time has already come in many rural schools, and is rapidly coming in others, when the grounds and out-Care required by side belongings must also have a large school grounds share of attention. The adding of trees and shrubs, the planting of school flower and experimental gardens, and the installation of play apparatus must finally lead to the expenditure of a greater amount of time in the care of this part of the school equipment. True, much of the work to be done on the school grounds, gardens and other exterior appointments

can and should be accomplished by the pupils under the instruction of the teacher. But there will always remain portions of the work that can not well be carried out without assistance. Especially, should the care of the premises required during the vacation time not be left to chance or volunteer service.

The time is therefore ripe for a change. The teacher-janitor system belonged to a day of simpler standards, fewer responsibilities, and greater necessity for petty economies. A generation ago the groceryman proprietor of the crossroads store might afford to sweep out his store at night after his customers were served, but the modern business man can employ his time better than in thus saving a few cents. The teacher of a modern school should no more be found sweeping his schoolroom than a merchant should be found sweeping his store, a doctor his office, or a minister his church.

Nor is the question alone whether it is expedient to burden the teacher with responsibility for the care of the school plant. The fact is that *the school plant is not being properly taken care of* under teacher-janitors.

Not infrequently expensive apparatus and equipment are so neglected or misused as soon to be of little service. A recent visit to a rural school showed not less than five hundred dollars' worth of charts, wall maps, atlases, dictionaries, cyclopædias and other miscellaneous material littered here and there about the building. Some of it was on dusty shelves, some of it stacked on an old table, some of it piled in a corner, and some of it deposited in an attic reached only by means of a trap door. Out of all this costly supply, almost none was available for use, simply because it had not been taken care of. The dis-

trict had furnished no special place suitable for storing the material, and the teachers had been too busy or tired to look after it. Both the district and the school lost by economizing on janitor service.

A number of states have a law making it mandatory on school officials to supply each school with a United States flag. The flag is purchased and sent to the school, and perhaps a flag-staff erected. The flag is used a few times, and then laid away on top of a cupboard, or in some desk or cloak-room, where it is forgotten. Soon it is soiled and covered with dust and unsuitable for use. It has served neither the purposes of decoration nor of patriotism, and only adds to the accumulation of dead property in the school.

Neglect of the physical equipment of the school affects not only its efficiency but frequently endangers the health of the pupils. An investigation of one rural schoolhouse showed

Health endangered by neglect that not a single window would open from the top, and only two windows from the bottom. These windows had all been stuck fast with paint five years before, and no one had made it his business to see that they were loosened. Who knows how many colds, sore throats and cases of pneumonia or tuberculosis might be traced to this criminal negligence! Another source of grave danger has been discovered in the enclosed water jars prescribed by law in certain states to replace the open pail. Official inspection of these jars during the year 1913 showed many of them wholly unfit for use, and far more dangerous than the condemned water pail. Not a few of them, when the lid was removed, gave forth a stench that permeated the entire

room. Inquiry revealed the fact that these closed receptacles had not been cleaned or sterilized during an entire term, and a few of them not since they were installed almost a year before!

A great cry has recently gone up against the unjacketed school stove, and this book has added its voice to the general condemnation. Yet one Janitors responsible for unjacketed stoves frequently finds a perfectly good stove jacket standing in a corner of the room, while the uncovered red-hot stove sends its withering blast of heat directly out on the children—usually the smaller ones—who are seated near it. Is this an argument against providing jackets for the stoves?—Not in the least. The jacket was removed during the spring to gain more space in the room, and the next teacher did not know how to replace it, or else the screws were lost. In other cases the screws attaching the jacket to the floor had come out, and no screw-driver was available to replace them. In a few instances thoughtless teachers have removed the jackets because they have found it easier to build fires and remove ashes without them. The remedy lies in having a janitor employed who will see that all school equipment is in serviceable condition.

In not a few new rural-school buildings where adjustable seats have been provided, the children are found sitting in seats which do not fit them, simply because the teacher—perhaps some young girl—either does not understand the mechanism of the seats or has not taken the time to adjust them. In some schools the adjustable seats have been discovered, after several years of use, all set at the same size, although occupied by children of all ages from six to

eighteen. The most modern equipment or apparatus will mean but little to either pupils or teacher if it is not properly cared for and used. In a new rural schoolhouse so built that the light might all come from one side, the county superintendent on his first visit several months after the school opened, found that the seats had been so placed that the pupils all sat directly facing the light! The seats had been put in place by a farmer who did not understand the principles of lighting schoolrooms, and no responsible person was at hand to supervise the work.

Investigation recently made in a rich northern state to discover the actual amount of attention being given **Equipment and apparatus out of order** to the care of the rural-school plant, revealed a grave situation. Fewer than one-half the schools investigated had scrubbed their floors within the current school year. As large a number had not washed the windows or cleaned the interior walls. Almost none had cleaned the pupils' desks. Some confessed that the blackboards and erasers were never given a thorough cleansing of crayon dust. Library books were scattered here and there over the room, lying on desk tops, on window-sills, and even on the floor. The books were ragged and torn and soiled, not from use, but from abuse. Few of the schools had mowed the weeds and long grass from the school yard. Far more than half had dumped the ashes in a great heap in the middle of the grounds. Loose paper, brush, lunch boxes and other rubbish littered the yard in many cases. The majority of the outbuildings were absolutely revolting. In many instances they bore indecent markings, some of which were of long standing. They were indescribably filthy, the doors were off the hinges, and

the appliances disfigured and broken. Inquiry revealed that scores of these outbuildings had had no inspection or care for months. No provision had been made to have such matters attended to, and careless or overworked teachers had neglected them.

The young teacher beginning work in the rural school usually knows little about caring for fires and managing a stove or furnace. The result is seen in buildings too cold to begin school on time; in rooms greatly overheated at times; and in stoves and furnaces burned out with half the service they are supposed to render. Not infrequently stoves have to be replaced every two or three years. Of course a large amount of fuel is wasted by such over-firing, to say nothing of the loss of oxygen unnecessarily burned from the air to be breathed by the school.

Not all of the schools that employ a janitor, however, provide for the smaller details, many of which are among the most important matters in the administration of the school. Even in some of the better consolidated schools, the only provision made for janitor service is to hire some man, or perhaps boy, to build fires, sweep and clear paths of snow. In very few instances is a competent person employed with the understanding that he is to have *charge* of the physical equipment of the school, and be responsible, under the direction of the teacher, for all details connected with it. Yet this is precisely what is required before we can put rural education on a rational business basis.

Every public school, large or small, should have some custodian responsible to the school officers for the care

**Need of expert
care of heating
apparatus**

**Janitor should
have full responsi-
bility for physical
equipment**

of the school plant. In all matters relating to the work of the school, the janitor should be under the general direction of the teacher. **Employing the janitor** He should be employed on a written contract that specifies in detail his duties and responsibilities. He should be instructed in hygienic methods of caring for a room, in the matter of ventilation and heating, in the care of apparatus and equipment, and all else that goes to insure the best working conditions of a school. He should be a man who believes in cleanliness, and has an eye to neatness and order. The position of janitor is no place for the aged or decrepit person unable to get work elsewhere, nor for one who is lazy, or who has a tendency to shirk.

The janitor's contract, with modifications to meet special conditions, should in general provide that the room, equipment and apparatus be made ready for each day's session and kept at all times at the highest state of efficiency. This will include such matters as heat, ventilation, cleanliness, repairing, and neatness and order in having all material and apparatus in its proper place.

More specifically, the obligations of the janitor should cover such points as the following:

Provisions of janitor's contract

1. That the schoolroom be heated to a temperature of approximately seventy degrees at least one-half hour before time for opening the session; and, if it is possible to have the janitor remain at the building, that this temperature be maintained throughout the day without care or attention from the teacher. This is plainly a part of the janitor's duty, and the teacher should be charged only with the responsibility of general oversight concerning it.

2. That the schoolroom, cloak-room and halls be carefully swept at the close of each day's session, using some of the approved floor preparations effective in preventing the rise of dust; that all furniture, window ledges, and other parts of the room on which dust can lodge be thoroughly dusted each morning before the arrival of the pupils with a cloth so treated with a suitable liquid preparation intended for this purpose that the dust shall be wholly removed and not distributed in the air.

3. That the floors be scrubbed with soap and water, or, if made of finished hard wood, cleaned with a special floor preparation every two weeks; that the desk tops be washed in a similar way as frequently as once a month, and the interior of the desks kept constantly free from rubbish and dust.

4. That all blackboards and erasers be cleaned and dusted daily.

5. That the windows be washed every four to eight weeks, depending on the amount of dust or smoke in the neighborhood of the schoolhouse.

6. That all outhouses be inspected and swept every day, kept clean at all times, and free from marks or other objectionable defacements; that all refuse be covered daily by dry soil or ashes; and that a disinfectant approved by medical authorities and supplied by the district be applied as often as once each week. In the case of interior toilet rooms the same principles are to apply, and the disinfectant to be used as frequently as in the outdoor closets.

7. That fresh drinking water be supplied for all sessions; and that the drinking utensils be kept scrupulously clean. If a pail or covered jar is used, it, together with the cups, is to be *scalded* once each week. If a filter is

employed, the rules supplied by the factory governing its use are to be followed explicitly in cleansing it. If water is used from a well on the premises, a sufficient amount must be pumped daily to insure a fresh flow in the well, and all refuse kept away from the well.

8. That lavatories, wash basins, soap dishes, or other toilet articles in common use be kept clean at all times; and that, if a common towel is permitted, at least one clean towel a day be supplied.

9. That all school supplies and apparatus, such as maps, globes, charts, references works, etc., be brought out for use or replaced in accordance with the directions of the teacher.

10. That all minor repairs to apparatus or equipment be made by the janitor as needed, so that the school plant shall constantly show care and attention and be ready for use.

11. That walks and paths be cleared of snow; that the school yard be cared for, mown when necessary, and kept free from ashes, waste paper, or any other form of rubbish; that fences and gates be kept in repair; and that trees, shrubs, or school gardens shall receive such care as may be agreed on, both during the school session and vacations.

12. That the janitor be responsible for the appliances furnished him for carrying on his work; that he be charged with locking the building each night; and that he perform any other reasonable duties asked of him by the teacher.

Besides the service provided for in such an agreement with the regular custodian, the school property will need certain other care and attention. Not infrequently repainting is neglected until the building presents an un-

kempt appearance, and has also been permanently damaged by the weather. Roof-gutters, allowed to rust for want of paint, rust through, and the plaster or interior decorations are injured. Chimneys or foundations disintegrate for want of repointing, or the roof leaks because of a few loose shingles. The building should be carefully inspected each year before the opening of the school for such needed repairs. The old adage, "A stitch in time saves nine," is true nowhere more than in the case of public property; and school boards should come to see the necessity for applying to the care of the school plant the same business methods employed in the management of the farm or shop. Nor should the teacher fail to remember that *his responsibility includes the material as well as the mental interests of the school.*

FOR TEACHERS' DISCUSSION AND STUDY

1. How much time each day would be required to keep your school building in good hygienic condition and all accessory work about the school done? Have you the time to do this work? Have you the strength?
2. Do you agree with the statement that a rural teacher should not do the janitor work even if paid for it? Do you think the dust of sweeping injures you?
3. How often is your schoolroom floor scrubbed? The windows washed? The desks revarnished? The walls cleaned? The outhouses looked after? The yard mowed and cleaned? Compare this with the conditions in town schools.
4. What is the condition of the water supply of your school? Are you certain that all drinking utensils are free from pollution?
5. What does your school need in the way of book-

cases, cupboards, shelves, shades and the like? Have you ever asked to have these things supplied?

6. Are all your desks adjusted to the sizes of your pupils? Are the conditions of lighting satisfactory?

7. Does your school yard need attention? Is there any understanding about who is to do this work?

8. What is your judgment of the janitor contract proposed? Does your school have all the service this contract specifies? Is there any thing unnecessary in the contract? Can you persuade your district to employ a janitor under such contract?

CHAPTER XXIV

THE ONE-ROOM SCHOOL

The one-room school is a present necessity. It is still the largest factor in rural education and will con-

The one-room school still a necessity to continue to be so for a number of years to come. There are now some six million boys and girls from the farms

who will receive all the education they ever get in these district schools. That the rural schools of a coming day will be consolidated, graded and equipped as well as the city school does not immediately affect a majority of this generation of rural pupils. In spite of all the progress that is being made, it is probable that far more than half of those now entering the rural school for the first time will never attend any other school than that taught in their home district. For a great school system can not be made over in a day, no matter how progressive the constituency. And especially is this true in a democracy, where the people themselves directly control their own educational affairs, and move only after lethargy has been overcome and conviction established.

We may therefore accept the one-room district school, for the present at least, as a part of our educational sys-

Capable of improvement tem. The problem then becomes how to make the thousands of these schools as good as they can become. For they are not to be accepted as they are, and tolerated at their present low

grade of efficiency. Even where consolidation with its indisputable advantages is at present impracticable the one-room school can be placed on a new and higher basis, and its value almost infinitely increased.

The district school has already felt the stimulus of the general uplift in education, and in many regions has made decided progress. The consolidated school has set a higher standard for all rural schools, and its example of efficiency is being emulated in hundreds of schools not yet ready to consolidate. Many rural-school patrons and officers are now earnestly seeking to afford the country children educational facilities equal to those of the town. State and county superintendents and rural-school supervisors are bending every effort to the same end.

Probably the greatest need in the campaign for better district schools is some standard or criterion of efficiency.

Need for a standard of efficiency Most rural-school patrons do not know how far their school is behind the times. They are not aware of the great progress recently made in education, nor of the increased demands for education made on the individual. They do not realize what more progressive communities are doing for their schools, nor that it would be possible for them to make their own schools as good. There is no intention of handicapping the children for want of education, but lack of standards renders many rural-school patrons incapable of understanding that they are falling short of simple duty to their children. They need to be awakened educationally. They need to have placed before them the opportunities their children are missing. For it is lack of comprehension rather than indifference or miserliness that most often explains the present failure to supply better schools.

In order to be effective this educational campaign must be carried on in the most practical and concrete way possible; example is far better than precept. A high-grade, efficient school, actually organized and run under average rural conditions, is objective proof impossible of contradiction. Such a school standardizes education for its entire vicinity, and is a powerful stimulus to other districts. It also defines the direction that improvements should take, and thereby renders definite the aim for other schools to follow.

In order thus to standardize rural schools and supply some criterion by which they may be measured, the plan **Standardizing rural schools** has been adopted in some places of establishing what may be called *standard schools*; or *superior schools*, basing such recognition on certain definite standards of excellence. In Illinois, for example, the school grounds and house furnishings, heating, library, water supply, outhouses, qualifications of the teacher, and the general condition of the school are inspected, and if found satisfactory, a diploma is granted designating the approved school as a "standard school." If the conditions are found to be exceptionally satisfactory the school is recognized as a "superior school." In either case a plate granted by the state department of education and bearing the words "standard school," or "superior school," as the case may be, is placed above the door of the schoolhouse. The diploma and plate are subject to recall if the school fails to maintain this standard.

It was found in Illinois that not more than one-fifth of the country schools when first inspected were up to standard. Four-fifths of them were **The Illinois plan** brought up to standard after inspec-

tion, by the suggestion and help of the state supervisor and the county superintendent. Once the patrons came to see the shortcomings of their schools and the means by which these could be remedied, they stood ready both with their financial support and their personal effort to meet the conditions necessary to give their children satisfactory school advantages.

The contagion of the influence of good rural schools is seen from the fact that a number of counties in Illinois now have half of their schools on the standard list, and it is predicted by the state superintendent that in a few years ninety per cent. of the rural schools of certain counties will meet the requirements of "standard schools."

The requirements for classifying a school in this honor list are not above what can be attained in a large proportion of the counties of every state, "standard" school and surely not more than must be demanded if rural children are to have reasonable opportunities for education. In order to be classed as "standard schools" the district must supply ample playgrounds with a well-graded and well-kept approach to the house. If the outdoor closets are used, there must be two scrupulously clean and well-kept outhouses widely separated from each other. A convenient fuel house, well placed with reference to the school building, and easily accessible, must be supplied. The schoolhouse itself must be well built, in the best of repair, and in every way suitable for occupancy. The foundation must bring the building well above the ground and be in good condition. The schoolhouse is to be well lighted and have an attractive interior, decorated suitably and in good taste. Adequate blackboards of good material must be supplied,

some of them placed low enough to be available for the use of the smaller children.

One of three types of heating devices must be installed: either a jacketed stove set in the corner of the room; or a combined heater and ventilator placed in one corner; or a basement furnace which draws clean air from the outside through the furnace, and removes foul air from the room. The floor of the room must be in good repair, and the entire interior of the building kept hygienically clean and tidy at all times. Desks of sizes adapted to the different ages of children are to be provided and properly placed. The schoolroom furniture must be of suitable type, including a good teacher's desk, bookcase and chairs. The library must contain a good collection of juvenile books, selected with reference to school work as well as for general reading. There must be organized and kept in active condition a pupils' reading circle. The school must contain a good set of maps, a good globe and dictionaries. It is required that the water supply for the school shall be plentiful, approximate to the building, and all sanitary conditions surrounding its use fully approved.

The school is to be well-organized, the records kept in businesslike manner and a definite program of study Standards in the school and recitation followed. The school attendance must show reasonable regularity and the school year be at least seven months in length. The discipline and management of the school must be good. The teacher is required to have the equivalent of at least a high-school education and to receive an annual minimum salary of not less than three hundred and sixty dollars. The teacher must also be approved by the county superintendent as a *good* or *superior*

teacher, and must read the professional books provided in the reading circle, besides attending teachers' institutes and other educational meetings.

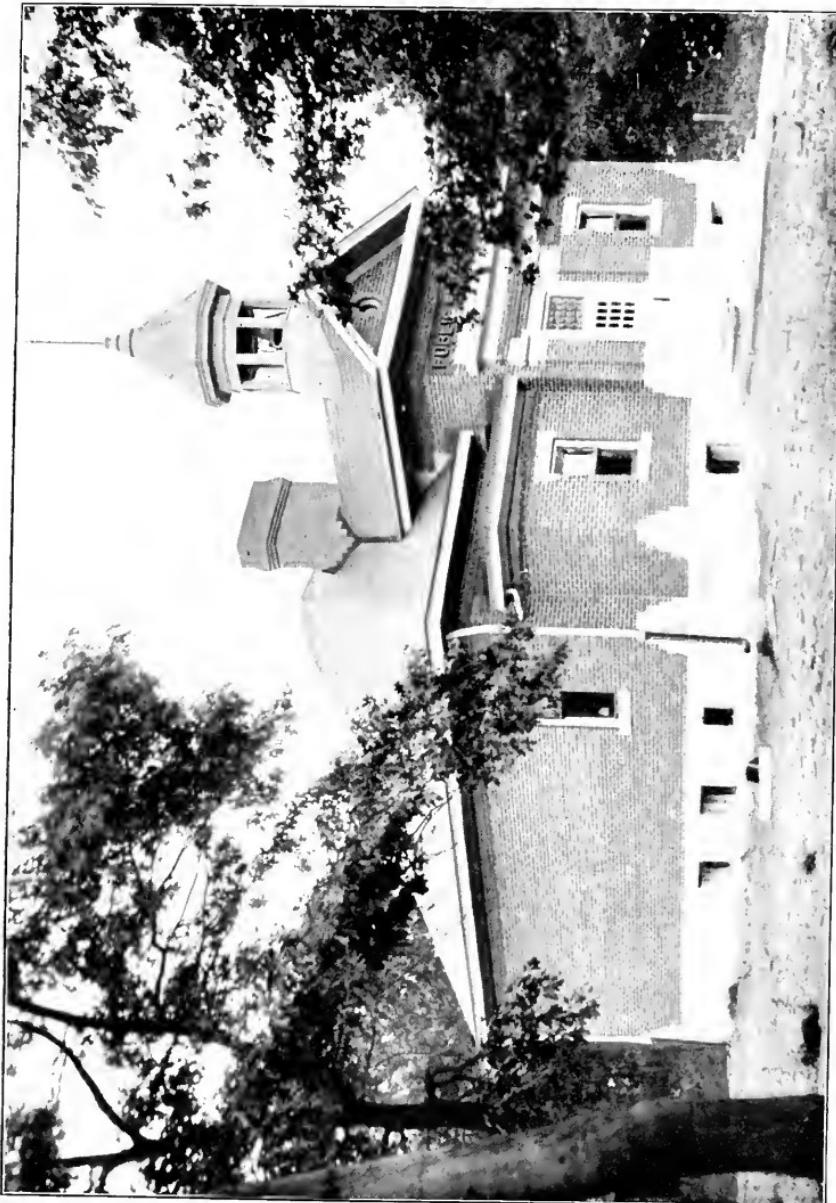
It has been found that many schools, having reached the grade of "standard schools" and found the advantages that flow from this improved "superior" schools type of school, desire to go on and attain the rank of a "superior school." This is possible by meeting certain additional requirements. In order to be classified as a "superior school" the school grounds must have an area of at least one-half acre, be level, covered with good sod and kept in perfect condition. The yard must contain a reasonable number of trees and shrubs. There must be an approved well or cistern, and sanitary drinking appliances provided. All outbuildings must be of the best and most approved type and kept in perfect condition.

In the superior school the building must be of ample size, attractive in appearance, in perfect repair, and must provide separate cloak-rooms
The building for boys and girls. The interior walls must be properly tinted and kept scrupulously clean. The lighting must come from one side, or from one side and the rear. The windows must be capable of being easily opened and shut and fitted with good shades. The floor must be laid with close-fitting lumber and kept in hygienic condition.

The ordinary heating stove will not be tolerated in a superior school, the heating requirement being either a
School equipment basement or room furnace which brings in the pure air from outside and removes the foul air by an adequate ventilating device. Blackboards must be fully adequate and adapted

Courtesy of H. L. Rogers (Ind.)

A model district school. Lighted from the north. Basement under entire building. Heated by furnace. Spacious hallways, cloak rooms; toilet inside; plenty of playground. Cost \$4,200



to the different sizes of pupils. The desks and all school furniture must be of high grade and fully adequate in amount for the needs of the school. The school must be supplied with a library of at least eighty books, a good cyclopedia, three dictionaries, writing and examination supplies, pictures for the walls, maps, globes, a set of measures and scales, a thermometer and a complete set of text-books for the teacher's use. All necessary equipment for the care of the room, including a floor brush and sweeping preparations, are to be provided. The personal comfort and cleanliness of the pupils are insured by requiring a wash basin, mirror, paper towels and other sanitary supplies as a part of the equipment.

The superior school must provide for the teaching of the elements of agriculture, manual training and the domestic arts. The teacher is not **The curriculum** only to be a high-school graduate, but must have had training in a normal school. He must hold at least a first-grade certificate and be paid a salary of not less than four hundred and eighty dollars a year. He must also be ranked as a superior teacher by the county superintendent.

The rapid growth of the demand for better schools wherever "standard" or "superior" schools have been established, whether these terms are **Hopeful tendencies** applied or not, indicates a hopeful tendency of the times. Where one of these model schools is once located in a township, it has usually resulted in the establishment of others within a short time.

One of the strongest factors in compelling improvement is the recent tendency to require the teaching of **Factors influencing progress** agriculture in all rural schools. More than a dozen states have in recent

years passed laws making agriculture, and in some cases manual training and domestic science as well, a part of the school course. The movement is still spreading, and it is safe to predict that within a decade very few rural schools can be found where instruction in these practical subjects is not a regular part of the school work. These educational requirements must from the very nature of the case result in better buildings and equipment. For it is impossible to teach agriculture, domestic science and manual training without equipment and room for the work, and these are not available in the old type of school.

The effects of the general spirit of progress in rural education are seen in the marked improvement in the Improvement in school buildings now being erected schoolhouses in most parts of the country. Gradually spreading over North, South, East and West, is to be found here and there a new type of schoolhouse, not in the least resembling the pitiful little structure it displaces. Many of these new schools are a delight to the eye. They are fitted with modern conveniences, and fully adapted to the work of the reorganized rural school. Architects are becoming interested in the problem of the district schoolhouse, and are giving their best ingenuity to devise moderate-priced buildings which will combine the maximum of hygienic excellence and service for school purposes with pleasing architectural effect.

The one-room building has excellent possibilities. It is not necessary that buildings shall be large and imposing in order to be beautiful and serviceable. On the other hand, not a few of our largest school buildings are least pleasing in effect and ill adapted to the service required of them, while many of the more recent one-room build-

ings are almost beyond criticism, both in appearance and usefulness.

The one-room school can be adapted to the requirements of the district nearly as well as the consolidated **Possibilities of the one-room school** building to its demands, if the same care and proportionate expenditure are devoted to it. There is no excuse to-day for expending public funds in the erection of rural buildings of the old type. Where this is done there is either ignorance or a low standard of education on the part of the patrons and taxpayers, and carelessness or betrayal of duty on the part of the officials supposed to supervise the erection of school buildings.

Certain well-established principles are now fully understood with reference to the construction of school **Requirements of buildings**, and should be applied both in the erection of new buildings and the reconstruction of old ones. The lighting should come from one side only, and not from two, three or four directions as in many of the old buildings. It is preferable that the light should come from the north, but where this is impossible, suitable shades must be provided to keep all direct sunlight from striking on the desks or any portion of the school work. The window space should be at least one-fifth as great as the floor space. Less than this will provide too small an amount of light on dark and cloudy days.

The floor should always be of hard wood, either maple or oak, close-laid to avoid cracks for the lodgment of **The floor** dust. The custom of flooring school buildings with cheap pine of five-inch width is wasteful extravagance instead of economy. For it is sure to shrink so as to leave great

cracks, and often slivers or curls at the edges, making the floor irregular and leaving lurking places for filth and dirt. The hardwood floor cleans more easily, lasts longer and is so far ahead in hygienic qualities that the slightly higher first-cost is not to be considered.

The day of the old plaster or wooden blackboard is gone. There are now many devices far ahead of either, **Blackboards** and costing little or no more than the old type of board. The most economical board to buy is, however, the slate slabs, which are practically indestructible, and which never get out of repair or show shiny spots where the writing can not be read. Old buildings with boards out of repair should be supplied with the slate board, since it is easily installed in the old building, and can be transferred to the new building when the old is replaced.

The seats and desks should be of the most thoroughly approved type. One hundred years ago the educational **School furniture** authorities were seriously debating whether a child should have any support for the back while sitting in school. We have passed beyond this stage, but we still often supply seats that do not fit the child, and which therefore render him uncomfortable and interfere with his health and development. In every school a reasonable proportion of the desks should be adjustable, so that they may be adapted to children either larger or smaller than the average. It is little less than criminal to sentence a child to sit in a seat from which his feet will not touch the floor, or on the other hand to crowd him into one so small that it does not allow him to sit in a normal position.

Every one-room schoolhouse should have a good base-

ment, well-drained, supplied with plenty of light, floored with cement, and kept as clean and dry as the room above it. In this basement should be installed a furnace for the heating of the building. In connection with the heating system should be a system of ventilation sufficient for constantly supplying the schoolroom with an abundance of air drawn from the outside, and heated during its passage through the furnace pipes. Direct radiation from a stove set in the schoolroom should no longer be permitted in any school. In spite of the various methods of jacketing the stoves, they are unhygienic, ugly and expensive. They take up room needed for better purposes, and the best of them have a tendency to freeze those in the far corners of the room while they roast those near by. A recent test taken with a thermometer in a stove-heated room on a cold day showed a temperature of less than fifty at the seats occupied by the most distant pupils, and of eighty-five at the seats of those nearest by. No wonder that some of the pupils were drowsy with the languor of heat, while others were distracted from their work by the discomfort of the cold.

The basement must not be looked on as an extravagance. On the other hand, it is a step in the direction of

Need of a basement economy in the supplying of room. For in the basement can be stored the fuel, which now so commonly occupies an ugly shed adjacent to the schoolhouse. This shed costs almost as much as the basement, and will constantly deteriorate, while the basement will not. Further, with the addition of manual training to the rural-school course, there must be some place provided for the work. What more natural

place than the basement? Here also can be provided the room for domestic science, now coming to be a part of the curriculum of the rural schools in so many states.

The walls of the schoolroom should be as well finished as those of our best homes. They should be tinted a subdued but pleasing color, and treated with an oil paint devoid of gloss, washable without injuring the effect of the decoration. In old buildings in which the interiors are dingy and forbidding, the freshening process should be thoroughly carried out, and the room made as pleasant and home-like as possible. This can be done at slight expense; that it is not more often done is largely because of the indifference of those having such matters in charge, rather than from motives of economy. The schoolroom should be supplied with a few good pictures suited to the age of the pupils. These should be worthy copies of the great masterpieces, and they should be well framed, and suitably hung. The custom of decorating the walls of the schoolroom with cheap posters and pages from the advertising sections of magazines, however well meant, should be severely condemned. There is a great inspiration in having constantly before one the suggestion coming from a fine picture; on the other hand, the gaudy worthless daubs so often seen in schoolrooms are of no help, and even serve to lower the tastes and standards. Excellent pictures of historic places and events; of famous men—Washington, Jefferson, Longfellow, Lincoln—can be had for small sums.

The furniture of the school should be of a good substantial type, adapted to the use to which it is to be put.

Care of school belongings All that is broken or marred should be mended or replaced. The lessons

Courtesy O. J. Kern (Ill.)

Modern district school room—well lighted, heated by furnace and seated to accommodate different sized children. The walls and ceiling decorated in olive cream



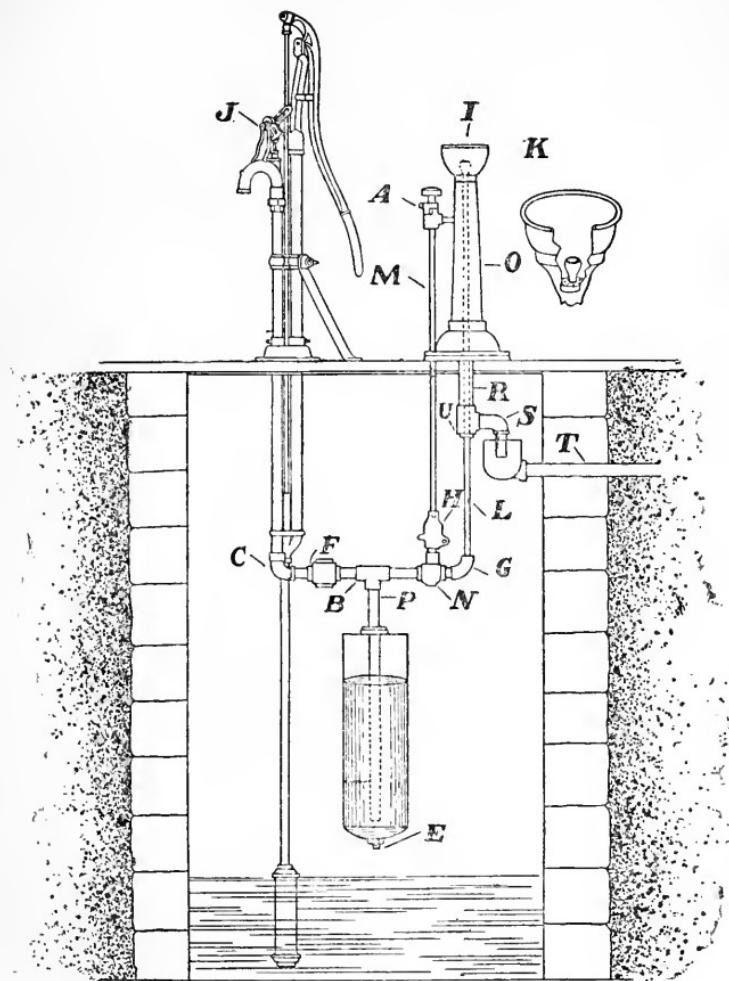
that sink into the mind of a child from seeing broken and scarred furnishings in the schoolroom unconsciously come to shape his standards for the furnishings of the home. The furnishings of the school require the best of care, and should at least once each year be subjected to a thorough cleaning and freshening process, with a free use of varnish or other means of making them new and attractive in appearance. This should be done in a workmanlike manner, and may well be a part of the course in manual training for the boys of the school.

Every rural school should have a library adequate to the uses of the school. One of the greatest gifts that **The school library** an education can put into the possession of the child is a love for good reading, and this can not be obtained without the right kind of reading material with which to develop the taste. Yet there are hundreds of district schools scattered throughout the country in which not a book is to be found except the text-books in the pupils' desks. This is a fatal weakness in the equipment of any school, and one that teachers and officers should set about to remedy at once. A minimum of one hundred good books carefully selected to meet the needs of the pupils should be the lowest number thought of as meeting the requirements of even a small school; nor should this number include the sets of supplementary readers, which are a necessary part of the equipment of every school. And, even with this foundation as a beginning of a school and neighborhood library, an annual appropriation out of the funds of the district of not less than twenty-five dollars, and as much more as the finances of the district will bear, should be devoted to the purchase of new books and magazines. One of the poorest places to practise a fool-

ish economy is in the school library. That books are sometimes lost or destroyed, is true; but this is no argument against supplying a library. The fault is rather one of management, and not a fault that necessarily inheres in the fact of supplying a school library. Let the district furnish a well-constructed case, fitted with good locks, and then make the teacher responsible for the safety of the books. The loss from carelessness or malicious mischief will then be no bar.

The sanitary arrangements of the one-room school should of course not be less perfect than those of the town or consolidated school. The old style **Hygienic conditions** of water pail and drinking cup should not for a moment be tolerated in any district school. In fact no system by which common drinking cups are used can longer be defended or condoned. The danger to health and life from such needless exposure is now perfectly well understood by all intelligent people, and there is no excuse for the negligence, well-nigh criminal, which in many districts still permits this menace to continue. It is gratifying to know that legislation is beginning to forbid the water-pail system of drinking in the schools; Indiana, for example, having replaced pails with closed stone jars supplied with a faucet. A still better device is the flowing fountain operated by compressed air, without the necessity of connection with a water-pressure system. Every dealer can direct school authorities to a number of satisfactory devices of this nature and the cost is not great.

A still better plan is to install a water-pressure system consisting of a three-hundred-gallon tank stored in the **The water supply** basement and supplied by means of a hand force-pump from the school



This force pump now makes the drinking fountain available without an expensive plumbing system. The children can easily do most of the pumping.

well. This system makes possible indoor toilets, and flowing water for a lavatory and other uses in the building. Such a water system costs from one hundred to two hundred and fifty dollars, exclusive of the well, and should be made a part of the equipment of every modern rural school.

The roller towel should be rigidly banished from the school, and only paper towels used. The expense is **Necessary equipment** hardly greater than with the old system, and has the advantage of cleanliness and freedom from the danger of disease. A good-sized mirror should be provided, and every incentive used to encourage rural children to take pride in their personal neatness and appearance. The common comb and hair-brush should be tabooed, and the children led to provide their own combs. If such features as these seem strange in connection with a one-room country school, it should be remembered that small matters bearing on the habits of daily life are often the most important part of education.

Outside closets, where such must be maintained, should be entirely separate for the two sexes and never, as is now commonly the case, built under the one roof or in close proximity. These buildings should be neat and in perfect repair. They may be screened by clumps of shrubbery and climbing vines, and must be kept scrupulously clean and free from every suggestion of questionable nature. Not to carry out this simple demand, so reasonable and clear in its necessity that none can question it, is to confess to an indifference toward childhood purity and morality that ill matches our interest in other lines of educational progress.

The surroundings of the one-room school can be made

as attractive as those of the larger school. It costs but little to level and grade the grounds where a farming community renders the use of teams, plows and scrapers available, practically without expense if the whole neighborhood is interested in the project. Shrubs can usually be obtained from the oversupply of the community, or they will cost but a few dollars if purchased from a nursery. Trees are available for the digging in almost every school district, or can easily be found along adjacent streams. Nor should the setting of the shrubs and trees be done after a haphazard fashion, but according to an artistic plan which can easily be obtained from the nearest agricultural college. The actual planting should not be left to the exercises of an official arbor day, nor entrusted to children who do not understand the setting of plants and trees. That the school should have a part in the planting is true, but an expert gardener should always be on hand to oversee and direct the work.

The spectacle of dead trees cumbering the grounds of many rural schools as they do throughout the rural communities is not a highly inspiring sight, nor does it encourage children in setting and caring for decorative vegetation at home. With the trees and shrubbery well set, the next problem is to insure proper care and protection until growth is assured. Mulching should be applied, and stakes driven to protect against accidental injury from the pupils in their play. If the season is dry, water should be freely applied from the school well. Grass and weeds must be kept down, and not allowed to smother the shrubs. The grounds should be as well cared for, even during the vacation, as the lawn of any well-kept home. Though

this will demand some trouble, and possibly a slight expense, the incentives coming from beautiful and carefully trimmed school grounds will far more than compensate for the few dollars involved.

The school garden is highly desirable in connection with the one-room school, as it is with the consolidated

School gardens school. It is, however, a hard problem in many parts of the country, especially in the North where the planting season opens late, and the schools close before the vegetation matures. After the schools are out the garden is allowed to go to waste, and the best results are lost. Yet many schools have succeeded admirably in maintaining excellent gardens. At least the school can encourage the planting and care of home gardens under the instruction of the teacher as a part of the work in agriculture.

The district school, in common with all other schools, must give more attention to the playground. It is not

The playground enough to provide a sufficient amount of ground, and do nothing more for the recreation side of school and community life. There should be a supply of simple apparatus—various forms of swings, teeter boards, a sand pile, horizontal bars and other devices such as are found on all well-organized playgrounds. These can be had at a nominal cost, and can for the most part be made in the manual-training shop of the school, or in case manual training is not taught, a neighborhood "bee" devoted to the construction of play apparatus would easily provide all that is needed. The chief reason why we do not have such equipment in more of our schools than we do is because the need of it has never been realized. This fact suggests an opportunity to the teacher.

The one-room school can be of great service to its community as a neighborhood social center. The schoolhouse should be the common meeting place for the discussion of all questions of interest to the community; educational programs, agricultural meetings, entertainments, lectures and conferences of various sorts all naturally belong to the school center. But the old type of building is not suited to such uses. The assembly rooms of the new buildings we are erecting should have this function of the school in mind, and be generous in size. In many of the newer buildings, the seats are fastened to slats instead of to the floor, and can be pushed aside, or to the walls when the room is needed for a general meeting. Folding chairs are then provided, and stored in the basement when not in use.

If it is said that the standards here proposed for the one-room school are far in advance of those that now prevail, and that the new type of school will cost the district more money than the old, this will all be conceded. But so does the farmer spend more for his machinery than he did a generation ago; his automobile costs more than he paid for the buggy that preceded it; and he spends more on his barns than he was formerly accustomed to invest in his straw sheds. Literally thousands of country schoolhouses are to-day in use that cost less than four hundred dollars, and which do not have ten dollars a year spent on their up-keep. The modern one-room schoolhouse should not cost less than three thousand dollars without the equipment. In most rural communities this type of building could be had without hardship in the way of taxation, and without bringing the

**These demands
both reasonable
and feasible**

school tax up to the rate usually paid in towns and cities. It is not poverty, but indifference and lack of information that stand in the way.

That the better type of one-room school is entirely feasible in the average community is proved by the excellent schools now in operation here and there in many states.

FOR TEACHERS' DISCUSSION AND STUDY

1. Do you think that by a concerted effort on the part of all the teachers and the superintendent of your county many one-room schools might be merged in consolidated schools? Would you be willing to help?
2. Have your district schools on the whole been showing any marked improvement recently? If not, how does it happen that they have not caught the rising spirit of progress?
3. Do you know of any particularly good district school that has served to stimulate other schools to improvement?
4. How do you account for the rather general indifference to education in country districts? Are the people not fully as intelligent naturally as those in towns?
5. What do you think of the Illinois plan of recognizing "standard" and "superior" schools? Could such a plan be introduced in your locality?
6. Even without official action recognizing your school, can you not bring your school up to the requirements specified? Do you think they are higher than *all* rural schools should meet?
7. What kind of pictures have you in your school? How are the walls tinted? Does your room really look pleasant and attractive?

8. Do you believe there is a moral value in attractive surroundings? Do you believe that an important part of education is to develop the tastes and standards that will render the individual dissatisfied with ugliness, squalor and dirt? Are your school surroundings such as to develop right tastes and standards?

CHAPTER XXV

SCHOOL HYGIENE

Conservation of health should be the first responsibility of the school. The relation of a sound and healthy body to success and happiness is so vital that the matter of hygiene constitutes one of the most important problems of education. The child goes to school during the period of life most formative physically as well as mentally. The effects of overstrained eyes, cramped or unnatural postures, impure air, or other harmful influences are therefore far more serious for the growing child than for the adult. On the other hand, right care and use of the body, and correct habits in youth will yield large returns throughout life.

The last few years have seen an unprecedented interest in hygiene and public health. Every magazine and newspaper presents articles on the question; clubs and societies are discussing the laws of health in their meetings; medical societies are issuing and distributing tracts; legislatures are seeking to incorporate hygienic measures into the management of our schools. Nor is this all a fad, the whim of a passing moment, to be forgotten when a more interesting topic arises. As a people we are awakening to the fact that it is possible to live longer, more happily and more successfully by obeying certain simple and easily understood laws governing

the functioning of our bodies. We are discovering that we can save much economic loss, sickness, sorrow and premature death by a little care and foresight with reference to our health. And nothing can be more important than this.

Recognition of the importance of physical health in any scheme of education led the city of Boston in the year **Medical inspection** 1894 to provide for the medical inspection of all school children. This seems to have been the beginning of the movement in this country. Medical inspection has now spread until it obtains in most of the important cities of the United States. A number of different states have also passed medical inspection laws applying to all schools, both urban and rural. Still other states have laws providing for the testing of the eyes and ears of all school children. In many places the teachers are required to have a knowledge of the eye and the ear, and of contagious diseases. There can be no doubt that our future educational policy will include *responsibility for the health and physical well-being of the child while he is in school*, and such training in hygiene that he will be able to maintain *a higher standard of physical efficiency outside the school* than is now the rule.

It is especially necessary that the rural school shall set high its standard of hygiene. For the rural community **Rural school to set** is lacking in boards of health, and the **health standard** proximity to doctors, dentists and oculists that characterize the city. Violations of the rules of public health in rural neighborhoods may result in an outbreak of disease before the offenders are discovered and checked. Slight ailments are not likely to receive medical attention until they have become serious.

Decayed teeth and diseased throats are not subjected to early treatment. Defective hearing and vision do not receive attention from the specialist, for none is at hand. The new movement for better hygiene has not yet reached the country as fully as it has the city.

One of the greatest opportunities of the rural school is to hasten this movement. The rural record for disease

Low hygienic standards and rate of mortality is out of all proportion to sickness and death in the city, when we take into account the more favorable natural conditions of country life. The dreadful toll taken by the contagious diseases has already been referred to in an earlier chapter. Doctor Hoag found in a recent study of the health conditions in the Minnesota rural schools that fully eighty per cent. of the children yet in the elementary school regularly drink coffee. Two out of every five suffer almost constantly from toothache, accepting it as inevitable and hence to be endured instead of cured. More than one-fifth of the pupils have frequent headaches, naively taking them for granted on the supposition that "everybody has headaches." From twelve to fourteen per cent. suffer from earache, and four per cent. have discharging ears, adenoids being responsible for most of this trouble, which usually ends in some form of deafness. From four to five per cent. of the children are sufficiently hard of hearing that they do not fully understand what is going on, and hence are put down as stupid when they are not.

The rural school therefore owes it to its pupils and patrons to do two things: (1) to make the hygienic conditions in the school itself such **Duty of school toward health** that no harm can come to the health or physical well-being of the pupils, seeking rather to

remedy such physical defects as are present; and (2) so to instruct in the laws of hygiene that the physical habits and standards outside the school may result in the highest efficiency at home.

Fundamental to all other questions of hygiene is an abundant supply of pure fresh air in the schoolroom.

The air of the schoolroom Rebreathed air is harmful in two distinct ways: (1) the supply of oxygen is depleted, and all the vital processes of the body run low from its lack; (2) the rebreathed air contains many more germs than pure air, and many of these are harmful, even when they do not produce specific diseases. Careful tests show that the air of a class-room that has been occupied by a class for an hour has more than double the number of germs contained by the air in the same room before it had been occupied.

One of the best illustrations of the effects of plenty of oxygen on brain power and general physical efficiency

Effects of open-air schools is seen in the results of "open-air" schools developed in recent years in several of our larger cities, and still more common in England and Germany.¹ These schools were started first for tubercular children, and those who were laggards in their classes, and unable to keep up with their work. The open-air schoolrooms have one or more sides exposed to the air, and in some instances, especially in England, the school is held wholly out-of-doors. It has been found in practically every instance in such schools in England, Germany and the United States that the physical health and vitality of the children steadily improved. In a large proportion of the cases, the disease was fully cured, and in nearly all, the weight rapidly increased. In every

¹ See Ayres, *Open Air Schools*.

instance, marked improvement has also been shown in mental ability, and in not a few cases the laggards have caught up with their regular grades and gone on doing full work. If plenty of fresh air will work such wonders for diseased or dull children, why is it not equally good for all children!

The recognition of the importance of pure air in the schoolroom has resulted in regulations in various states that the schoolroom must contain a **Air space required** certain minimum of air space for each pupil in the room. For example, the health authorities of Indiana close all schools that do not have at least two hundred and fifty cubic feet of air space for each pupil. The board is then obliged to enlarge the room or make some provision for a part of the pupils in another school. Some such provision should obtain in every state.

But even with two hundred and fifty cubic feet of air to each person, the air must be frequently changed in order to be at its best. Not alone pure air, but a *moving current* is necessary in order that the entire body may be bathed in changing air. For recent experiments have conclusively shown that the effects of stagnant air on the body are almost if not quite as injurious as if taken into the lungs. Every schoolroom should therefore be equipped with some effective ventilating device to connect with the heating apparatus. But even with the best of the devices available for the small school, the doors and windows should be thrown open for at least five minutes at each intermission, and the room thoroughly aired. Where there is no ventilating device, a number of windows should constantly be open.

The lack of pure air to breathe is probably the worst

hygienic fault both in our homes and in our schools. This is all the more to be deplored, since air is free, and can be had in abundance at the expense of a little care. Yet in how many homes and schools is the air carefully excluded, especially during the winter months! No wonder that we reap a crop of pneumonia, bronchitis and colds in the late winter and early spring. It is but the logical outcome of lowered vitality, and the presence of disease germs ready to take advantage of the weakened powers of resistance.

The temperature of the air taken into the lungs and immersing the body is almost as important a factor as its purity. Scientists have found by careful experiments that even air which has been rebreathed until it contains several hundred per cent. more carbon dioxide than it should contain does not occasion serious suffering or immediate inconvenience, providing that it is kept cool and in constant circulation.

To test the effects of ventilation and temperature on the body, Doctor Leonard Hill constructed a small experimental chamber, making it air-tight, and providing it with a window through which he could observe the occupants. The chamber was fitted with both heating and cooling devices, and with electric fans. Seven students were shut in this chamber, for about half an hour, thus being compelled to rebreathe the air many times over. They were kept until the carbon dioxide, which should constitute less than five-hundredths of one per cent. of the air, had risen to four per cent, and the oxygen, which should make up about twenty per cent., had fallen to sixteen per cent. The temperature was also

increased to nearly eighty-five degrees. The students soon experienced great discomfort and difficulty in breathing; their faces became flushed and covered with perspiration. At this stage the electric fans were set in motion, and immediate relief was experienced. They were still breathing the same old stale air, but when it was driven by the fans there was a constant change from the air next the skin, which had risen to about ninety-eight degrees, to the cooler air of the chamber. When the temperature of the air was reduced, still further relief was felt. This experiment does not mean that there are no bad effects from living in rebreathed air; it rather teaches that perfect ventilation can not be had without constant *currents* of air strong enough to supply changing air to the surface of the body as well as to the lungs. It also suggests the necessity of guarding against the overheating of rooms.

A temperature higher than seventy degrees has a tendency to interfere with the vital processes of the body, and leave the mind dull and inactive. It is probable that those who are well and strong can easily become accustomed to a temperature even as low as sixty degrees, and certainly as low as sixty-five degrees, and be all the better for it. One can form the habit of requiring an overheated temperature in order to feel comfortable, or of being at ease in a relatively low temperature. Every schoolroom should be provided with a thermometer, and the temperature carefully guarded. A schoolroom sizzling at eighty or ninety degrees with the thermometer ten below zero out-of-doors is a positive menace to health, if not even to the life of pupils.

Cleanliness is a cardinal virtue in the school. Filth and

dust are the home of many harmful germs. Therefore the schoolroom, the furniture and the books should be kept perfectly clean. Dust should not be allowed to accumulate on the floor, the window ledges, or about the desks. Millions of germs slightly heavier than the air in which they float, settle down in the dust and when it is later disturbed, again float in the air, adding to the already too-abundant supply. In many schoolrooms the presence of dust can be detected in the air after a class has passed, or the school has marched in or out. This condition always means carelessness in the cleaning of the room, and brands it hygienically unfit for use.

The remedy is, of course, to remove the dust daily—actually to *remove* it with a damp cloth, and not simply stir it up in the room by swishing it off the desks with a dry cloth or a feather duster as is so often done. Far better leave the dust quietly reposing on the furniture than to drive it off into the air to be breathed by the pupils. The floor should be thoroughly swept every evening after school, and scrubbed every two weeks during the term. The desks should be revarnished once a year, and should be kept clean at all times. In short, the schoolroom should receive as good care as any well-ordered home. It should not only itself be a healthful place in which to live and work, but should stand as a model of cleanliness and good housekeeping.

One of the most difficult problems of hygiene in the rural school is that connected with the water supply. In thousands of rural schools the water

The water supply has to be carried a considerable dis-

tance in pails from some convenient farmhouse. Of course with this scanty supply there is no opportunity to wash hands before eating the noonday lunch or after a game. There is barely enough for drinking purposes, and the supply is allowed to stand all day in an open pail, exposed to the dust and dirt of the room, and absorbing the poisons of the air. Both pail and cup are infrequently washed, and become coated with grime. The cup is a veritable cemetery of cells and saliva deposits from many lips, and the distributor of various kinds of disease germs.

It is true that this dangerous and filthy method of supplying drinking water is absolutely forbidden in many places; it should be tolerated in none.

Drinking utensils A covered stone or metal tank supplied with a faucet can be had for a dollar or two, and individual drinking cups may be supplied at a small expense. Even this equipment will not keep itself clean, however, but will need constant care and attention. In fact such an outfit as this is itself but a makeshift, and should at the earliest possible moment give way to the flowing drinking fountain, several excellent types of which are intended for use in buildings lacking city water connections. No common drinking arrangement is safe that does not provide some means for drinking from a flowing stream, without putting the mouth to metal that other lips have touched. Any lower standard than this indicates either a woeful ignorance of the simplest laws of hygiene, or an inexcusable indifference in the exposure of children to the dangers of contagious diseases.

Attention to a few simple rules for the lighting of the schoolroom and the protection of the eyes would save a



Getting a drink. The method that prevails in three-fourths of the district schools in the United States to-day



The modern way

great deal of defective vision. Medical tests of the eyes of school children have shown an appalling proportion of pupils with faulty vision. And there is grave reason to believe that the school serves on the whole to increase these defects instead of remedying them. Many of our school buildings have windows on three, or even on four, sides. In many thousands of schools the windows, even on the sides exposed to the sun, are not provided with shades. And even where shades are not lacking, they are not always adjusted so that the direct sunlight is shut from the desk tops or from the books.

The newer schoolhouses are being planned with careful attention to lighting effects. In the older buildings the teacher should devise means by which the eyes of pupils may be protected as fully as possible. The absence of shades usually indicates carelessness and indifference rather than stinginess on the part of the district. Blackboards should never be used at such an angle that they reflect the light into the eyes of the pupils, nor when they have become cracked and shiny so that the writing is not plain. These are all simple and commonplace matters, familiar to teachers and school officers, yet it is from the neglect of just these hackneyed points that many of the physical ills that afflict childhood, and much of the mental dulness of not a few of the laggards in our rural schools, come. There is no phase of rural education that needs attention more than the hygiene of the school.

As an example of an enlightened attitude toward the hygiene of the school, the following regulations recently adopted by the Indiana state board of health, and having the full force of law in that state, are given:

Site and Grounds.—All schoolhouse sites shall be easy of approach from a street or public road. A slight elevation is preferred and where the ground is low it must be properly drained to insure proper playgrounds and freedom from dampness. The site shall be not less than five hundred feet from any swampy ground, body of stagnant water, cemetery, slaughter house, fertilizer reduction plant, any business or manufacturing establishment which engenders noxious odors or vapors or that pollutes the surrounding atmosphere by smoke or dust, or any place of industry where undue noises prevail. The site shall consist of not less than one acre. School playgrounds shall have an area of not less than thirty square feet for each pupil and shall be well drained and graveled and free from depressions. Ground not occupied by buildings shall be laid out in lawn and garden with shrubs and shade trees.

School Building.—No school building shall be more than two stories above the basement. Doors shall open outward, and double doors or storm doors shall be without fastenings except spring hinges. All doors shall be unlocked while school is in session. No class room shall exceed twenty-four feet in width, ceiling not less than twelve nor more than fourteen feet in height. Main corridors shall be not less than eleven feet in width, and in buildings of more than eight rooms not less than thirteen feet in width. All floors of toilet rooms, basement rooms not used for class purposes and all inclosures for plumbing fixtures and steam fittings shall be of nonabsorbent waterproof material. Wherever possible, floors of laboratories, domestic-science rooms and corridors shall be of like material. Mattings or other floor coverings shall not be permitted, except in superintendent's or principal's

office, rest room and teachers' rooms. All inside wood finishing shall be small as possible and free from unnecessary dust catchers.

Lighting.—No window shall have more than four lights, and the tops of windows shall be square. Prism glass shall be used to diffuse light when necessary. Where the light in any schoolroom is from the north, the proportion of glass to floor area shall be not less than one to five.

Heating and Ventilating.—Heating and ventilating systems shall take fresh air from outside the school buildings, evenly diffuse the same throughout each schoolroom during school session and withdraw foul air from the room at a minimum rate of eighteen hundred cubic feet an hour for each two hundred and twenty-five cubic feet of schoolroom space, regardless of outside atmospheric conditions. The rules provide a system of testing the efficiency of ventilating systems. Trustees, school boards, board of school commissioners, county, city or state superintendents or ten or more patrons of a school may request the board to make such tests.

Stoves and Heaters.—Where stoves or furnaces are used provision is made for fresh air to be taken from outside the building and the installation of a foul air flue. The stove or furnace shall be of sufficient size to heat the room to seventy degrees in zero weather. Provision also is made for safety in the installation of the furnace. The jacket shall be of heavy galvanized iron, black iron or other equally durable material, and shall be lined with asbestos. The rules contain a table showing the size of chimneys, diameter of vent pipes, the free area of foul air vent, area of free air intake, area of smoke flue, etc.

Where ventilating systems are used, fresh air shall be

taken from outside the building through windows into a room in the basement constructed for that purpose, with tight fitting door, and impervious, smooth walls, floor and ceiling, known as the fresh air room. No basement air shall be permitted to enter the air supply. No fresh air opening or foul air vent in connection with any system of ventilation shall be closed at any time when school is in session.

Provision is made for the location, ventilation and heating of cloak-rooms and wardrobes. Where cloak-rooms are not provided, steel lockers may be placed in corridors, provided they do not become obstructions.

Windows in all schoolrooms, whenever practical, shall be opened at recess and before the opening of afternoon school sessions.

Water Supply.—Open or dug wells or springs shall not be used. No well shall be within one hundred feet of any privy, cesspool or other known source of contamination. Tests of the water supply are provided for.

Sanitary drinking fountains shall be installed.

Lavatories.—Enameled iron sinks or wash basins shall be installed. Soap and sanitary paper towels shall be used. Common or roller towels are prohibited. Sewer drainage is provided for.

Water Closets.—Where a sewer system or pressure water supply is available water closets to the number of one seat for each fifteen females or fractional part thereof, one seat for each twenty-five males or fractional part thereof and one urinal for each fifteen males shall be installed. All such equipment shall be of sanitary construction. Ventilating openings are provided for. Toilets shall be clearly marked "Boys' Toilet" and "Girls' Toilet."

Where sewer system or water supply is not available either an indoor crematory, sanitary closet system or outdoor sanitary closet system shall be provided. So-called dry closets shall not hereafter be used. All outdoor closets shall be effectually screened and protected against flies.

Seating.—Class and study rooms shall have aisles on all wall sides. Center aisles range from seventeen to twenty inches in width and wall aisles from twenty-eight to thirty-six inches in width.

General provisions.—Furnace, boiler and fuel rooms shall be built of fireproof construction. No closet for storage shall be placed under a stairway. All doors must be unlockable within. Air must be humidified before entering the rooms. Vacuum cleaning is preferred. Dry sweeping or dusting is prohibited, and there shall be no sweeping while school is in session.

FOR TEACHERS' DISCUSSION AND STUDY

1. Has the recent general interest in health and hygiene reached your school and community?
2. Do you find it possible to ventilate properly your schoolroom? Do you give the matter careful attention? Do you notice dust in the air after the school has been marching or passing about the room? If so, what does this indicate?
3. What are the conditions about your school that need immediate remedy for the sake of the health of the children and yourself?
4. Compute the space in your room and see whether there is as much as two hundred and fifty cubic feet to the occupant. Also determine whether your room has window space equal to one-fifth the floor space.

5. Do you allow slates to be used? If so, how are they cleaned?

6. Has your school a good well? If so, has it a force pump. If it has the latter, an apparatus can easily be installed which will give you as good a bubbling fountain as in a city system. Could this not be installed?

7. Is the dusting of your schoolroom properly done, that is, is the dust *taken up* by dampened dusting cloths?

8. Are the desks misfits for any of the children, so that curvature of the spine is likely to result? Are the seats properly placed with reference to the desk tops, so that they do not require the pupil to sit on the edge of the seat or lean forward in order to reach the desk?

CHAPTER XXVI

PERSONAL HYGIENE

Although the hygiene of the school and its surroundings may be made perfect, this is not enough. For hygiene must, after all, finally become a matter of personal standards, the demand of the individual for the conditions that favor health and longevity. Not until each pupil not only knows the laws of hygiene, but recognizes and desires their benefits in his own life, has the school fully accomplished its purpose in physical education.

In spite of the powerful effects of good examples, there are many pupils who will go from a well-ventilated schoolroom to sleep in a close and stuffy bedroom, or from a school where the temperature is moderate to sit in an overheated room, without thinking of its ill effects. Thousands of children in our schools learn to recite lessons on the care of the teeth, and yet never form the habit of the daily cleansing of the mouth. They study the effects of coffee on the growing organism, and yet freely drink it at their meals. They are fluent in describing the results of using tobacco, and still use it. They can pass perfect examinations on the rules for bathing, but violate most of these rules. They understand the danger of the common drinking cup and the roller towel, but constantly dare the risks. They are aware of the danger

of overstraining the eyes, yet they will sit facing a strong light while they read.

In some degree this discrepancy between theory and practise must be expected, for it is a part of human nature. None of us lives as well as he knows how to live; it is always easier to preach than to practise. Yet this does not affect the truth of the principles involved. The school must not only teach its pupils the laws of hygiene, and provide hygienic conditions under which to do their work, *it must also so inculcate these lessons that they are practised in the daily lives of its youth.*

Children should never be so taught as to have their minds centered on sickness and disease, or their fears of **Health the right of the child** death aroused; many nervous and sensitive children suffer from the dread of these things as it is. On the other hand, the child should be led to expect and demand health and happiness. The pathetic fatalism that makes many children accept toothache, earache, headaches, colds and the like as part of the inescapable woes of childhood, should be removed. These pains should be understood as the penalty for the violation of certain physical laws, which it is a part of their education to discover and apply. They should come to demand health, instead of resignedly accepting suffering; and to have a pride in physical vigor and well-being, instead of in fortitude under pain. They should come to look on premature death and the ravages of contagious diseases, such as typhoid fever or tuberculosis, not as the visitation of an inscrutable Providence, but as a catastrophe resulting from our own blindness or unwillingness to follow physical laws that are perfectly well known. Approached from this point of view there is no danger of making a child morbid by

teaching him concerning disease; instruction makes for his peace of mind rather by showing him how to avoid sickness and gain health.

Training in hygiene should be begun before the habits of the child are fixed. Ordinarily nothing short of a complete collapse of health will shake an adult out of his accustomed habits of eating, sleeping or working. Even some of the world's greatest authorities on hygiene daily violate the rules they lay down for others, because they formed their personal habits before they acquired their knowledge of hygiene, and find it too much trouble to change. But the child can easily be led to form correct habits, providing the models and incentives are effective. Tooth-brush clubs, fresh-air societies, coffee-prohibition unions, and other organized hygienic efforts can be made a great factor in fixing habits of right living among children.

The mouth is said by some authorities to be the most neglected and ill-kept organ of the body. Recent investigations show that approximately ninety per cent. of the children in our public schools have diseased teeth or defective mouths. The decay of the teeth is one of the most prevalent diseases known to modern civilization; and the neglected mouth is a most fruitful breeding-place of disease germs, the open gateway through which they enter the system. It has been estimated that uncleansed mouths and decayed teeth are the cause of more diseases, ill-health and suffering, especially in childhood, than all the other organs put together.

The poisons coming from decaying teeth are a constant menace to the health, and seriously lower the vitality even when no specific disease is caused. A series of ex-

periments conducted on the school children of Cleveland showed a remarkable increase in health, strength and working efficiency when the teeth were properly cared for and the mouths were kept in healthy condition. In one group of these children who were suffering from various mouth troubles, a series of tests was carried out for a full year. As a result their working efficiency in school *averaged an increase* of ninety-nine and eight-tenths per cent.¹ Similar reports come from Boston, and other places where the medical inspection of school children is practised.

These facts contain a double suggestion for the rural school-teacher. First, through proper care of the teeth and cleansing of the mouth daily, much of the decay that attacks children's teeth and many of the other mouth difficulties can be saved. Further, all children should have their mouths inspected by competent dentists at least twice each year, and the tooth cavities filled. Tooth-ache is practically unnecessary in childhood, and is a sure sign of conditions that need immediate attention, not alone to avoid suffering but to protect the general health as well. It has been thought by many that the teeth of children, being only temporary at best, were not worthy of serious attention, at least before the arrival of the second set. It should be one of the aims of the teacher to dispel this foolish and harmful notion.

A very common defect noticeable in children is what is called "mouth-breathing." This is usually caused by a **Adenoids** bacterial growth in the back part of the nasal passages known as *adenoids*. Adenoids not only hinder the breathing of the child, but

¹ Report of W. G. Ebersole, M. D., before the Fifteenth International Congress on Hygiene.

sap his vitality and interfere with his physical development to such a degree that the average size of children suffering from adenoids is considerably under that of normal children of the same age. The effect of adenoids on mental growth and ability is fully as marked, and many a child thought to be backward in his intelligence has suddenly shown himself to be normally bright when the adenoids were removed. Every child who habitually breathes through his mouth has some defect of the nasal passages which should have the attention of a physician. The problem is not alone that of the immediate health and development of the child, but also in many cases decides whether the trouble shall become permanent and perhaps result in deafness, or whether it shall be cured by a simple operation or other treatment.

Enlarged tonsils constitute another serious trouble of childhood. Few children escape all forms of throat troubles, and a considerable proportion are subject to recurring difficulties growing out of diseased tonsils. This condition is easily detected by a swollen and inflamed appearance at the back of the throat, and is usually accompanied by a tainted breath. The tonsils when in this state predispose to several serious diseases. They offer the most fruitful culture-ground for the diphtheria germ, and admit the pneumonia germ into the system. And even if these more serious diseases are not contracted, inflamed tonsils are certain to result in recurrent attacks of tonsilitis, and other forms of sore throat. Incalculable damage is done to the health and development of children by the neglect of this simple matter, which can usually easily be remedied by a physician. Nor should it be forgotten that

every child with diseased tonsils is a constant source of contagion to others.

The average country child is at a great disadvantage in the matter of bathing. The bathroom is a part of the **Hygiene of bathing** regular equipment even of the cheaper tenement houses of the cities, while many a pretentious farmhouse located on a quarter section of fine land is innocent of all arrangement for bathing except such as is afforded by the family wash tub brought into the kitchen for the special occasion. It is not strange under such conditions that the bath degenerates into a weekly performance, approached without enthusiasm and experienced without enjoyment. Indeed it is to be feared that winter bathing is almost unknown in more than one rural home, and that many children come to look upon the bath as a luxury instead of a necessity. While this is one of the most delicate problems in hygiene which the teacher has to meet, it is one that most needs to be courageously faced. Let the children once get their standards fixed at the frequent bath, let them come to realize both its necessity and its pleasure, and much will have been done toward adding the bathroom to the rural home. And this one factor alone would go far toward bettering hygienic conditions surrounding farm life.

The hygiene of food is a matter that the pupils can not themselves control to any great extent in the home, since the standards are fixed by the older **Hygiene of food** members of the family, and the children are expected to eat what is placed before them. The introduction of domestic science into the schools, however, and the new emphasis being placed on the teaching of hygiene, offer hope that the influence may extend from the school to the home. Children should be taught the

harm that comes from a too constant use of pork as a meat diet, and should be led to discover the cause of many of their headaches in the overuse of the frying-pan. Fresh fruits and vegetables are a luxury on many farm tables, though they are absolutely necessary to good nutrition. With an abundant supply of good milk available on the farm, most farm children early contract the habit of drinking both coffee and tea. Such unhygienic habits of diet as these are largely a matter of ignorance or carelessness. There is no thought of stinting in the supply of food, and most families believe that the children are well fed. What is needed is a new set of standards of what constitutes suitable food, especially for growing children. And it is a part of the function of the rural school to help, through the teaching of personal hygiene, in establishing such standards.

Probably from twenty-five to thirty-five per cent. of the children attending the rural schools have a sufficient defect in vision to interfere with the best success in study. A considerable number of these have forms of eye trouble that will constantly become worse if not treated in time. Not infrequently the eye-strain is such as to cause nervousness, irritability or headaches on the part of the children. The mother of such a child recently came to the teacher and complained that her daughter was working too hard on her studies, as she came home each night with a headache. The teacher had a suspicion that the difficulty was with the child's eyes instead of her studies, and persuaded the mother to take her to an oculist. The difficulty was removed, and the girl not only lost her headaches, but improved in her studies.

While it is not to be expected that the teacher can be

trained in medicine, or know how to apply technical tests to the eyes or ears, this is not necessary in order to detect signs of defects of these organs. Simple tests of vision can be given in a few minutes from cards that can be ordered for a few cents from any oculist, and which should be a part of the equipment for teaching hygiene in every school. The hearing can be tested by the ticking of a watch, or through speaking in a low tone some distance from the pupil, and asking him to repeat the words pronounced.

Physical form and carriage easily result from the postures and movements habitual to youth. Let a child sit **Bodily postures** and write for a few months at a desk that is too high for him, and curvature of the spine follows. Or let him sit awkwardly "lopsided" as he works, and the result is the same. One large school for girls has found that almost forty per cent. of the girls coming from the public schools have curvature of the spine. School postures are responsible for most of this. Leaning forward over the desk while studying contracts the lungs, thus decreasing their air capacity, besides giving a permanent stoop to the shoulders, and causing unnecessary strain to the eyes. A careless shambling gait soon becomes habitual, and finally characterizes its possessor. Lounging as one sits, crowds the organs of the body and indicates both physical and mental indolence.

Two factors enter into the successful teaching of personal hygiene: first, the children must be taught the facts **Making instruction effective** about their health and growth, and the laws that govern them; but next, and not less important, they must be stimulated to apply these laws to their own lives. Any well-informed teacher

can teach the laws of hygiene, but it is the teacher of exceptional power and influence who can make these laws effective in the lives of his pupils.

Perhaps the hygienic habits and standards of the teacher himself are the most important influence of all in **The teacher's health** the effective teaching of hygiene to children. The teacher whose entire personality radiates health and physical well-being has a great advantage over the teacher suffering from ill health or any physical defects. Perfect teeth, well-kept hands and nails, an easy poise, grace of movement and all other signs of care and attention to the well-being of the body are a constant source of suggestion to the pupils. On the other hand, decayed or uncleansed teeth, untrimmed nails, stringy hair, or other evidences of carelessness in personal hygiene will go far toward nullifying the most expert teaching.

As a safeguard to their own health teachers need to give the most careful attention to personal hygiene.

Teacher's liability to disease Reliable statistics show that teachers are shorter-lived than workers in other occupations. They are also subject to various ills induced by their work and manner of life which, while they may not shorten life, rob it of much of its joy and satisfaction. A study of the cases of illness among eighteen thousand teachers for one year showed them to be liable especially to influenza, nervous complaint, throat and chest difficulties, intestinal disorders and anemia. In the matter of tuberculosis the teacher makes an appalling showing, the mortality rate being approximately as high for the teaching profession as for the notoriously unhealthful occupations of stonecutter or saloon-keeper.¹

¹ See Terman, *The Teacher's Health*, page two hundred and fifty-nine.

At its best the work of teaching is highly fatiguing. A great part of the teacher's work must be done standing, thus adding physical strain to long-continued mental exertion. The teacher's mind must be keyed to a high pitch for hours at a time, the attention finding hardly a moment for relaxation. The actual teaching must be done while order is maintained in the class and in the school, and while the responsibility for the whole organization rests on the mind of the teacher. Both mind and body are therefore kept at high tension during the greater part of the school-day. Nor does the teacher's work end with the closing of the school. Every teacher, especially in the rural school where there are so many different classes to teach, requires at least half as much time to read written work and prepare for the next day's lessons as is devoted to actual teaching. This means, therefore, a day fully as long as that of the laborer, and at an occupation vastly more wearing to health and vitality.

The character of the teacher's work, together with the nervous strain, results in an excessive eye-strain.

The teacher's eye defects The proportion of teachers suffering from various forms of trouble affecting the eye is from this cause greater than the average for other occupations. In Germany thirty-five per cent. of the teachers wear glasses; the percentage is somewhat less in this country, though it is probable that the difference is more from an unwillingness to wear glasses than from less eye-trouble. The part played by eye-strain in producing headaches, nervousness, insomnia and other disorders is too well known to require comment.

Not a small part of the danger to the teacher's health is connected with the matter of nutrition. This is par-

ticularly true of the rural teacher, who usually does not live at home, but boards in the family of some farmer **Nutrition and the teacher's health** of the district. The table set in this teacher's home may be bountiful and well adapted to the nourishment of those engaged in hard physical toil. But the teacher has comparatively little physical exercise, and does not require the heavy diet suitable for the workers on the farm. The appetite which craves fruit, fresh vegetables, cereals and other lighter foods, rebels at the abundance of meats, gravies, fried potatoes and rich pastries that characterize the farmer's table. And the teacher, not being in his own home, naturally feels it impossible to get food different from that eaten by the rest of the family. The result is often indigestion, malnutrition and a general condition of lowered vitality, if not physical degeneration.

In view of these conditions the teacher owes it to himself and his school to provide as wide a margin of safety **The teacher's margin of safety** as possible for his health. He can do much to relieve the eye-strain by consulting oculists, and following himself the rules for the hygiene of the eye which he teaches his pupils. He can provide for a reasonable amount of daily exercise in the open air, preferably in the form of games that will occupy the mind as well as the body. The matter of the boarding-place should receive the most careful consideration. The schoolroom can be kept well ventilated, and free from dust. The heat of the room can be regulated, and an open basin of water kept on the stove in winter to increase the humidity of the air. The habit of worry over school problems and of dwelling on the unpleasant or puzzling matters of the day can be reso-

lutely abandoned, and in its place the tendency to happiness and pleasant moods cultivated.

And the school as well as the teacher will profit by the teacher's obedience to the laws of hygiene. For it is the **Health and efficiency** teacher whose nerves are worn and whose digestion is impaired, who scolds and is short of temper and cold in sympathy. But the teacher who is the embodiment of health, and who is himself the best proof of the value of the hygiene he teaches, is a constant stimulus to right living on the part of the pupils.

FOR TEACHERS' DISCUSSION AND STUDY

1. What laws of hygiene are most habitually violated by your pupils? Can you make your teaching so effective as to reach these bad habits?
2. What percentage of your pupils under sixteen years of age drink coffee? Smoke? How many have bad teeth? Bad tonsils? Defective hearing?
3. What provision do you make in your school for washing the hands? What kind of towels do you use? Are paper towels preferable to linen for school use?
4. How many of the homes of your pupils are provided with bathrooms? Do you know the bathing habits of your pupils? Will it not require much tact on the part of the teacher to discuss hygienic questions effectively without giving offense?
5. How many of your children actually use a tooth-brush at least once a day? Can you devise any methods to lead them into this essential habit?
6. Do you know how to give simple tests for vision? For hearing? Have you given any such tests?

7. Have you felt any ill effects on your own health from teaching? Do you worry? Have you lost or gained in weight? Have you any tendency toward tuberculosis?

8. How far do you think the standards of personal hygiene you set are followed by the pupils? Is it likely that bad habits may be followed, even if good habits are not?

CHAPTER XXVII

THE PLAYGROUND

The country affords the natural playground for childhood. Here there is plenty of room, and sunshine, and **Country life** air, and freedom. In the city it is **and play** not so. The buildings take up all the room; there is often no place worthy the name for playgrounds,—the occasional vacant lot, the prim park, the streets full of traffic and presided over by policemen, and now and then a roof! Tens of thousands of city children have no place to play, except where play is forbidden. During a recent month there were some five hundred arrests of children for misdemeanors on the streets of New York, and almost half of these arrests were for playing ball! Thus play becomes a crime, because there is no room for it. It is only the country that is not crowded for space.

One would expect from these conditions that we should find the country children the best players in the world, adept in all athletic sports, and realizing in them an important factor in physical, mental and moral development. But such is not the case. Rural children in general are not skilled in play, for they do not have the opportunity to learn to play. True, much of the best play does not need to be learned formally, but is spontaneously picked up through imitation, or invented on the spur of the moment. But, on the other hand, play

activities can be much broadened and their interest increased by guidance. Play, like work, needs to be learned as an art. Especially is this true of games, which are but *organized* play.

The rural child is ordinarily greatly limited in his range of games. He sees but few different games **Rural children do not know how to play** played, and is seldom taught new games. As a still further handicap, he often attends school where there are so few children that to organize games successfully is impossible. The result is that many rural children do not utilize even the little time they have for play. They may often be seen moping around the schoolroom at recesses, when they should be out on the playground. Or they gather in little groups, or separate off in pairs for conversation or gossip. Bickering, quarreling, tale-bearing and fighting are much more common than in the town schools, where the children are too busy in play to engage in these things. Under such conditions the social impulses are not cultivated; the ideals of sportsmanship are lacking; and the powers of initiative, decision and daring required in games are not developed.

It is impossible for children to develop normally without play. Indeed, play is a constant factor in all ranges of animal life. Says Karl Groos: "Perhaps the very existence of youth is due in part to the necessity for play; the animal does not play because he is young, but he is young because he must play." Schiller says, "When hunger no longer torments the lion, and no beast of prey appears for him to fight, then his unemployed powers find another outlet. He fills the wilderness with his roars, and his exuberant strength expends itself in aimless activity"—he engages in play. So if we watch

the swarming insects dancing in the sunshine, the playful kitten chasing its ball, the lambs frisking in the sunshine, we see the same impulse at work; they are but obeying the common impulse to play.

A recent writer says: "Wherever freedom and happiness reside, there play is found; wherever play is lacking, there the curse has fallen and sadness and oppression reign. Play is the natural rôle in the paradise of youth; it is childhood's chief occupation. To toil without play places man on a level with the beasts of burden."

"But why is play so necessary? Why is this impulse so deep-seated in our natures? Why not compel our young to expend their boundless energy on productive labor? Why all this waste? Why have our child-labor laws? Why not shut recesses from our schools and so save time for work? Is it true that all work and no play makes Jack a dull boy? Too true. For proof we need but to gaze at the dull and lifeless faces of the prematurely old children as they pour out of the factories where child labor is employed. We need but follow the children who have had a playless childhood, into a narrow and barren manhood. We need but to trace back the history of the dull and brutish men of to-day and find that they were the playless children of yesterday. Play is as necessary to the child as food, as vital as sunshine, as indispensable as air."¹

The moral value of play can hardly be overestimated. City playgrounds have been found to transform gangs of hoodlums into well-behaved baseball teams, and prospective crimi-

¹ Betts, *The Mind and Its Education*, page one hundred and seventy-seven.

nals into skilful and law-abiding athletes. Children who are engaged in active play not only find an outlet for surplus energy, but have their minds safely employed as well. There is a stage in the development of youth when the thoughts need to be occupied with objective interests, and not allowed to rest on self. Loafing and dawdling are always dangerous occupations for young people, and especially so when they are in the company of others of the same age. Many immoral and impure suggestions could be saved the minds of innocent childhood in our rural schools if provision were made to utilize all the recreation time in healthful play, instead of allowing it to be spent in mischievous idleness.

The dearth of recreation and amusement in the country is one of the most fruitful causes of young people ~~Evils resulting from lack of play~~ deserting the farm for the city. For youth demands its playtime as naturally as it demands its food and sleep. Let rural schools provide as fully for the natural play activities of its boys and girls as is coming to be done in urban schools, and these interests will prove a powerful anchor attaching the youth of the farm to rural life.

Children should be taught to play, just as they should be taught to study or to work. Instruction should be given in the activities of the playground, as well as in the activities of the schoolroom. Plays and games, not less than mathematics and science, should form a part of the curriculum. In Germany and England, the play period has long been a regular part of the curriculum. It is being rapidly introduced in many of the more progressive of the towns and cities of the United States

at the present time, and is nowhere more needed than in the rural school.

The question naturally arises as to the school playground and its equipment. For the introduction of play as a part of our system of education carries with it the necessity for adequate grounds and material, and these must be provided for as much as the equipment of the shop or the laboratory. It need hardly be said that the average rural-school yard is not calculated for a playground. It contains all the way from a few square rods to about one acre of ground. The schoolhouse is usually set near the middle of the area, with the coal or wood-shed adjoining, and two outbuildings at the rear. Trees are often located in such positions as to interfere with the use for play of what small space there is left. The grounds are seldom leveled, or the grass and weeds kept down. Of apparatus for the playgrounds, there is usually none. The sign posted on the side of an Arkansas school building, "Fifty dollars fine for any one found trespassing on these grounds after school hours," represents an attitude of mind altogether too common with reference to the use of school premises as playgrounds. The school yard has been one of the least utilized of our educational resources.

During the last ten years, however, a great play movement has arisen and is spreading rapidly throughout the country. Cities are spending hundreds of thousands of dollars in obtaining room for their children to play, and in supplying equipment for grounds already provided. Even in towns and villages, and here and there in country schools, the movement has taken hold, and the school

yards are being utilized as playgrounds. Equipment, often rude and poorly constructed, but nevertheless far better than none, is being installed. Not infrequently this apparatus is purchased through the enterprise of the school itself, or built by the members of the school and the patrons.

The playground movement should spread until it includes every rural school in the land, whether this school **Grounds necessary for rural schools** be the old type of district school or the larger consolidated school. Such a project successfully carried out, will require larger and better equipped grounds in connection with many country schoolhouses. It is impossible to set any arbitrary standard for the size of the rural-school ground because of the greatly varying sizes of the schools. But it should be large enough to lay out a baseball diamond, and not require the appropriation of neighborhood pastures or fields as is so often the case at present. Where the school grounds are used for a neighborhood park and picnic place, as is coming to be the rule in many places, still larger grounds should be supplied. The minimum size for the average rural-school ground should not be less than two acres. If the school is a consolidated school and desires to have neighborhood athletics as well as the general school play carried on, then the grounds should be correspondingly larger.

The schoolhouse should not be set in the center of the grounds as is so often done, thus so dividing the **Placing of the school building** area that it is impossible to lay out suitable athletic grounds on any part of the area. The building should be near the front, with shrubs, perennial flowers and a well-kept lawn between it and the road. At the sides and rear of the building

there will then be space for the athletic activities without interfering with the windows, or with plants and shrubs growing on the grounds.

The school playgrounds should be thoroughly leveled and sodded and the grass carefully mowed, not only **Preparation of the playgrounds** during the school term but through the summer as well, in order that coarse stubble and weeds may not interfere with games and play when the school first opens in the fall. All rough places should be smoothed, gullies filled, stones and cinders removed, and everything else accomplished that is required to put the grounds in first-class condition. It has been estimated by one student of school playgrounds that half the rural-school yards of the country could be improved fifty per cent. by the simple process of closing school early one or two afternoons, and setting the children at work with rakes, hoes and shovels, leveling, cleaning up and otherwise putting the grounds into condition. Where the yard needs a more thorough treatment than can be given by the pupils, the school officers should not hesitate to employ the help required and pay for it out of public funds.

The next important factor is that of apparatus. A great many schools are now installing play equipment **Play apparatus** on their grounds. Very frequently this is done without consultation with any authority or expert on the matter of apparatus, and the best is not always selected. And not only is the best apparatus not always chosen, but some that is positively dangerous is being employed. The various pieces are frequently set in wrong places, and sometimes they cost several times what they should. All these difficulties can be removed by a little care and study.

The simplest, cheapest and most serviceable piece of equipment for the play of younger children is the sand bin. In fact the sand bin may be called the forerunner of the whole playground movement, for out of it have grown many other developments of the playground idea. Long before the child is old enough to start to school, he loves to play in the sand, and this interest continues up to the age of ten or twelve years. The sand bin takes up little room and may be placed in some corner where the larger children would not find space enough for their games. It should be about eight by twelve feet and ten inches high. Around the edge should be placed as a table a twelve-inch board, which may be used either for molding the sand or as a seat for the young children. The sand bin should be placed in the shade, as otherwise the sand becomes too hot in the summer time, and the children are exposed to the heat when at play. The finer and whiter the sand the better, although any good plasterers' sand will be suitable. It is evident from hygienic considerations that the sand should occasionally be removed and clean sand be put in its place.

Probably the most common piece of apparatus for the play of young children is the swing, and almost every school when it starts the installation of play apparatus begins with swings. School swings The swing is, however, unless certain cautions are observed, one of the most dangerous of all pieces of play apparatus. Swings are also frequently so constructed as to look unsightly, and obstruct the use of the grounds for other play. The most approved type of swing now being used on the school playground has the frame made

of steel gas pipe from two and one-half to three inches in diameter. The uprights are well braced in both directions and set in concrete footings some twenty inches square and from three to four feet deep.

The great danger from swings is not, as most people think, from falling out while the swing is in motion. This, as a matter of fact, rarely happens. Nine accidents out of ten caused by swings are from hitting children who are running by. If a child runs past the swing and is struck on the side of the head by the swing board, he will certainly be seriously injured, and runs danger of being killed. A device commonly used in connection with school swings is that of nailing a piece of rubber hose on each side of the swing board to deaden the blow in case a child is struck. Swings for school yards should not be more than ten feet high, and for younger children not more than eight. As much enjoyment can be had from a swing of this height as from a taller one, and the danger is altogether less. Swings should always be set in such position that they operate *parallel* to the school fence or building, and never at right angles, because of the greater danger of striking children engaged in other play. If swings are placed under strict rules, such as allowing no children to swing standing up, the danger from their use will be greatly minimized. The steel pipes together with the footings for the swing can be purchased from the local machinery dealers. The boards can be made by any rural carpenter or by the boys of the school. There should be several swings as a part of the playground equipment of any good-sized rural school.

The see-saw as a piece of play apparatus is as old as

the impulse to play itself. It is not, however, one of the most satisfactory devices for the school ground. In the first place, the see-saw requires practically no physical exercise, it involves no mental skill or invention and requires but little social mingling. It therefore possesses a minimum of advantage in physical or mental training. The see-saw, if not well constructed, is also one of the most dangerous pieces of apparatus, simple and harmless as it looks. Especially is the short see-saw to be dreaded. The steep angle increases the liability that the child at the lower end will slide off, letting the other one drop down to the ground. The longer the see-saw, the safer, provided it is not lengthened beyond the point of safety in strength. The long see-saw should be carefully supported and the number of children allowed on either end at the same time strictly limited. Every see-saw should be provided with some device by which the child can cling with his hands. One school which had recently introduced a new set of poorly constructed see-saws reported a half-dozen broken arms within a few weeks of their use. Probably the best school ground see-saw is made out of a fourteen-foot plank, twelve inches wide, set upon a steel or concrete support.

A newer piece of apparatus and one rapidly coming into great favor upon the school ground has been copied from the amusement park. This is known as the *slide*. That the slide will minister to a very fundamental play impulse is evident from the fact that all children possess an irresistible tendency to slide down banisters, cellar doors, or any other available slope. Many people have the idea that

the slide is dangerous because of its height. One experienced play director reports, however, that in thirteen years' constant experience with the use of school playground slides, no accident of serious nature has ever occurred except by slivers from carelessly made slides, where cheap material was used. Mothers sometimes object to the use of the slide as play apparatus, saying that it is hard on clothes. This, however, is disputed by those who are familiar with its use, especially if the slide is made of smooth material and kept in good condition.

Unlike the sand bins, the see-saws and the swings, the making of the slide should probably not be under-

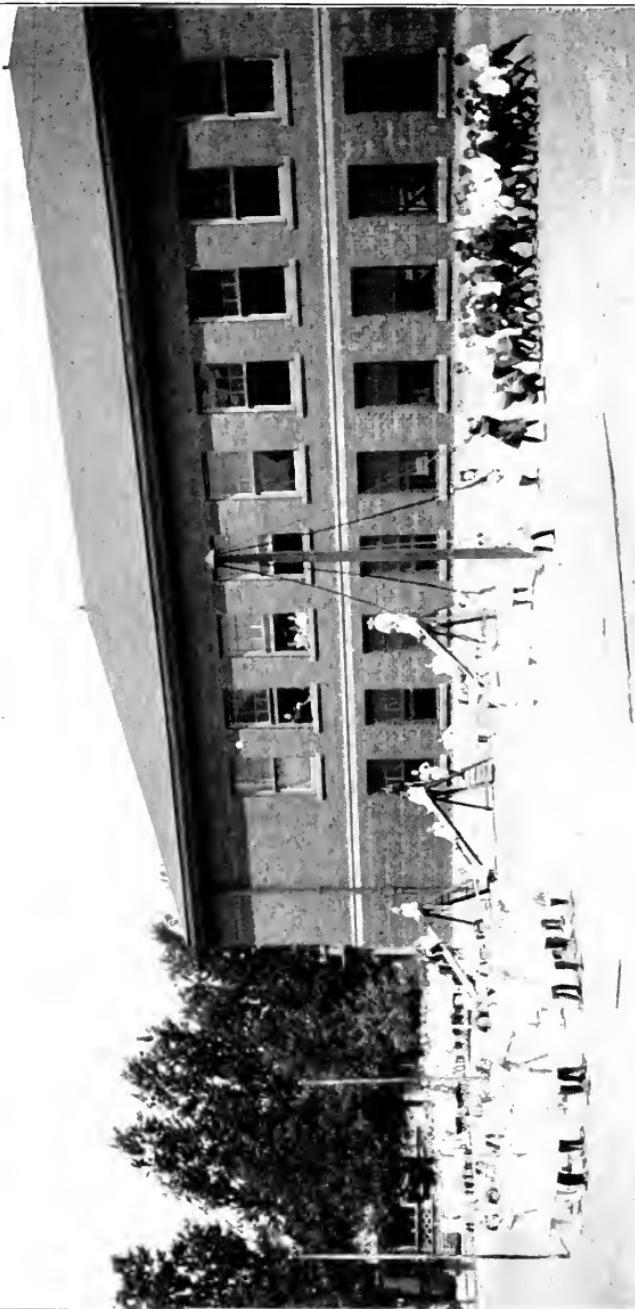
Installation of the slide taken as a piece of home construction.

It can be bought for as little as it will cost to make it, and for less if a carpenter has to be hired for its construction. Steel slides have been devised and are found in operation in various playgrounds. They are, however, not entirely satisfactory, being at all times subject to rust, and in the winter proving too cold and in the summer too hot for comfort. Probably the best slide is that made of maple. This material sometimes warps slightly but it never slivers and can be finished very hard and smooth. The cost of these slides can be estimated from the fact that a Chicago firm sells a nine-foot slide for seven dollars and fifty cents and a fifteen-foot slide for twenty-five dollars. Although the slide costs slightly more for first installation than some other pieces of apparatus, it is really highly economical, as almost any number of children can use it, following one another in rapid succession. One slide will thus serve many times the number that can use a swing or a teeter board.

The horizontal bar should be a part of every school playground equipment. Half-grown boys always have

Courtesy of F. F. Heightway (Ind.)

The slides and giant strides on the Whiting School playground, Whiting, Indiana



acrobatic tendencies, and desire to show their muscular strength and agility in the various performances possible with the horizontal bar. These **The horizontal bar** bars are easily set either in substantial wooden posts or on steel supports similar to the standards for the swings. It is well in a school of some size to have several bars, one five and a quarter feet, one six feet, and one six and a half feet high. Since it is usually impossible to have mats under these bars as is the rule in gymnasiums, the solid earth should always be dug out from under them and the cavity filled with fresh sand, so as to reduce the danger from falling. The bar itself should be detachable from the posts so that it can be taken in and kept free from rust when not in use. Suspended rings for acrobatic performance can also be easily and cheaply installed. These should be of standard make, and so securely fastened that no accident from breakage is possible. If, in addition, several two-inch climbing ropes are included in the equipment, this phase of the playground apparatus will be fairly well provided for.

Besides such equipment for play, the school ground should provide an adequate equipment for certain games.

Equipment for games It has already been suggested that a baseball diamond should be permanently laid out on the school ground. If the school is consolidated and hence has a considerable number of larger boys, a football field will also be desirable for fall use. Basket ball is coming to be a favorite game with both boys and girls, and a basket-ball court may well form a part of the equipment of the school playground. Where space will permit, the girls will find the game of

hockey highly interesting and well adapted to the type of play that should engage their attention.

Many schools are at present introducing indoor baseball played out-of-doors. This game is suitable for girls **Indoor baseball** as well as for boys. The regulation diamond is thirty-five feet square, but the game can be satisfactorily played, at least by girls, on a twenty-seven-foot diamond. Bases are made of sacks filled with sand, and a seventeen-inch ball is used. The diamond should be so placed that the ball will not be batted over the fence or against the school windows.

Volley ball is coming to be one of the favorite school games, especially for schools that have not sufficient room

Volley ball for all kinds of games upon the playground. It is a game that requires but very little space and one which children of all ages can easily learn to play. It demands constant activity, quickness of perception, and accuracy of judgment; and it has a tendency to correct the effects of bad postures in the schoolroom. The equipment costs next to nothing. Closely related to volley ball is another ball game called "tether" ball. This game also requires but little space and is adapted to people of various ages and to both sexes. The rules for laying out all these grounds and for playing games can be had from any athletic library, such as the Spaulding Library, of Chicago, for ten cents for each set of rules.

It is doubtful whether any weight-throwing such as the discus or the shot or even quoits should be allowed on the **The running track** school playground on account of the danger to the children engaged in other sports. However, every rural school could easily provide a running track and a jump-

ing pit along one side of the yard. The running track will not require any special expense except the smoothing, although if the track is cindered and rolled, it will be an advantage. The track should be some ten feet wide and if possible one hundred yards long. This track will be found highly serviceable not only for the larger boys, but for the younger children as well. Students of child life have discovered that interest in running has reached its height at the age of ten or eleven years, and has a tendency to decline after that age. An almost endless number of relay races and other forms of track events can be arranged if this simple device is provided for.

Finally, the rural-school playground should have at least one, and probably several jumping pits. The pits should be filled with sand, which ought at all times when in use to be kept well stirred, and soft, so as to avoid the jar that comes from striking after the jump. The approach to the pit should be supplied with a regular take-off board for the broad jump. As a companion device, there should be a pit provided with standards carefully set for the high jump.

If it is objected that all this equipment costs so much that it is out of the range of possibility in the average rural school, it may be answered that with the neighborhood help available, the entire equipment could probably be installed for less than one hundred dollars. It is doubtful whether any other one hundred dollars invested by the community in the education of its children will bring larger results or greater happiness than this investment in the school playground and its apparatus.

And even if public funds are not at present generally available for the equipment of the school playground, the

case is, nevertheless, far from hopeless. New movements usually must be initiated by private enterprise.

Cost of apparatus Many of the best school playgrounds and how met now in use were prepared and the apparatus provided through the efforts of enthusiastic teachers and pupils. School sociables, entertainments, auctions of articles made in the manual-training shop or the domestic-science course, and canvasses for funds by the pupils, are some of the means that have been successfully employed for this purpose. Often a "neighborhood day" can be arranged in connection with some school program, and a large amount of work on the grounds and apparatus carried out without cost. In many cases, material even, has been freely given by patrons or friends interested in the playground. An enthusiastic, well-informed teacher can furnish a playground for his school if he will.

This all means that the teacher must himself know how to play. He should know plays and games as he knows

The teacher must know plays and games his arithmetic and geography, and be able to instruct on the playground as well as in the class room. He should

be familiar with playground apparatus, and know the best types and their cost. He should be able to direct in the laying out of a baseball court, and to supervise the erection of swings, giant strides and teeter boards. The books of rules governing the games suitable for the school should be as much a part of his library as any other reference works. Nor should this preparation and knowledge be in any sense perfunctory or professional. The teacher should love play for its own sake, and believe in it as an important part of education, both for himself and his pupils.

FOR TEACHERS' DISCUSSION AND STUDY

1. Do the children of your school know how to play—have they a rather wide range of plays and games adapted to their age and sex?
2. Have you taught your pupils any new games? What books of games and plays are you familiar with? Were you ever *taught* games and plays?
3. Have you ever found pupils quarreling or fighting principally because they had nothing better to do? Are the children safer morally when engaged in play than when loitering about?
4. Is your school ground suitable for games and plays? If not, could it not be improved to make it so?
5. Do you not believe that you could arrange to have your school equipped with a reasonable amount of play apparatus as described in the chapter? Would it be a good plan to start the project with a school sociable in order to raise a fund?
6. You can, of course, arrange for a running track, jumping pits and the like with absolutely *no* expense, if you can obtain the help of a number of the larger boys of the school to do the work. Will it not pay you to do at least this much as a start?
7. Do you plan to inform yourself on the matter of plays and games and their rules, so that you can direct, referee, or even coach for them?
8. Do you, yourself, like games and plays? Should a teacher play with the pupils?

PART VI

THE OUTLOOK FOR RURAL
EDUCATION

CHAPTER XXVIII

THE NEW EDUCATION

What, then, is the outlook for rural education? America is the land of big things. Ours is a country so broad

Greatness of American enterprise that three centuries have not sufficed to people all its vast domain. We are engaged in undertakings so large that

the continent is spanned by a railway, or a canal is blasted through a mountain range to unite the waters of the oceans, and we hardly stop to think about it, let alone to wonder over it. We are busy garnering fortunes from natural resources so rich that we can only guess at the wealth hidden away in our mines, our forests and our soil. We conceive our commercial enterprises in hundreds of millions of dollars; we run our skyscrapers up fifty stories; and we spread our factories out over broad acres of ground.

But the greatest projects and most significant enterprises in which we are to-day engaged are not, after all, the extension of our boundary-lines, the digging of our canals, or the operating of our factories,—but *the running of our public school system*.

This is true if we consider the question from the standpoint of the destinies involved; for the very foundations **Magnitude of our school system** of both home and state are found in the public schools. It is true from the standpoint of expense: two million dollars each

school-day, some four hundred million dollars a year, go for the current running expenses of our schools. The schools are our greatest project viewed from the number of people engaged in the work; for on each school-day nearly twenty million boys and girls look into the faces of half a million teachers. Twenty million school children! A number two-thirds as great as the entire population of the country when the guns were fired on Fort Sumter. Twenty millions! So many that if they should take hold of hands in one great line they would girdle the earth at its greatest circumference. Or, if they were gathered at one place, say on the eastern coast, formed in columns of four, military fashion, and marched westward across the country, other fours wheeling into line continuously at the rear, the head of the column would have to pass across the coal fields of Pennsylvania, across Ohio and Indiana, on out across the great Middle West, and on to the very waters of the Golden Gate before the last of the fours would find room at the rear of the column. So great is the army of American boys and girls whose future success and happiness depend so largely on the efficiency of our great system of schools.

The American public school system really had its origin on the day when the one hundred pilgrims left the *Mayflower* and set foot on the new continent. There they stood on that gray autumn afternoon, with three thousand miles of threatening waves between them and the homes they had deserted for a principle. There they stood, with three thousand miles of unclaimed wilderness, but no homes, before them. These Puritans possessed a genius for three things: government, religion and education. And

**Origin of our
public schools**

it is to their genius for education that we owe the beginnings of our school system. For in 1636, when Boston was but six years old, these colonists did a marvelous thing: they started the Boston Latin Grammar School, a school of high-school grade. Boston was then but a straggling little village along one crooked street; poverty was threatening the very existence of almost every household; and nearly half of the members of the colony had been carried to their last resting-place on the hillside near the village. Yet out of their penury and want, they found it possible to provide for education, so that learning might "not be buried in the graves of the fathers."

But they did not stop here. Before the first generation after the *Mayflower* cast anchor were past school age, **Early educational progress** Massachusetts had passed a series of school laws laying the foundations of our entire school system—the first in the world to offer education free to all at public expense through taxes voted by the people themselves. It is not our purpose to trace the fascinating story of the development of the struggling infant of yesterday to the great giant of to-day. Suffice it to say, that as our nation grew and waxed strong, the schools were changed to meet new conditions, until we have the magnificent system of the present day.

But the change is still going on. Indeed it is taking place faster to-day than ever before. The twentieth **Profound changes now under way** century, young as it is, has seen changes so marked that we are justified in speaking of "the new education." We are on the eve, if not in the midst, of an educational movement that will have profound social effects, and result in fundamental changes in our educational system.

Nor is this new movement confined to any one class of schools. It reaches from the largest city school to the smallest rural district. Our people everywhere are experiencing a new birth of educational interest and enthusiasm. Legislatures in every state are passing new laws promoting education. National, state and private commissions have been appointed to study various educational questions, and a large proportion of these commissions are devoting their attention to the rural schools. The daily press, the weekly press and the magazines are giving an unwonted amount of space to criticizing or defending the public schools. That much of the discussion is irrelevant and much of the criticism unjust does not so much matter. It is far better to discuss a thing without settling it than to settle it without discussing it. The main point is that thinking people everywhere are coming to realize that our greatest national problems are *those connected with the education of our children.*

The urgent need is for the teachers, the natural leaders of the educational movement now getting under way, **Present need of leadership** to see clearly the weighty problems involved, and the magnificent opportunities offered. They must be ready to direct the tide of this newly awakened energy and enthusiasm so that progress shall result. They must be able to teach the ignorant, to arouse the indifferent, lend courage to the weak-hearted, and spur on the indifferent. For much needs to be done. The people are far from clear at certain points as to what they need or desire. They only know that education is coming to have a new and more vital meaning, and that one's usefulness as a citizen, and one's efficiency and future happiness depend very much

on the quality and amount of this education. They know that a new ideal for education is arising, but they are not wholly clear as to the nature and meaning of the ideal. It is for the teachers to reveal this to them. But the blind must not undertake to lead the blind. The teachers themselves must catch the spirit of the new education, and be its true interpreters to the people whom they serve.

Every teacher needs now and then to step back from the details and minutiae of his work and view it in its larger aspects; for the forest is always in danger of becoming hidden by the trees. We need to separate ourselves from the daily grind and routine, and take a survey of the broader educational problems, especially as they relate to our own field of activity. For only thus can we make sure that we are moving toward a goal, and not merely in a circle.

It is the purpose of this volume to help the teacher take such a view of our contemporary education, with especial reference to the rural schools. Looked at from such a vantage point, what do we discover? What are the ideals toward which we are moving? What can we do to increase the efficiency of the rural schools for the millions of American boys and girls who receive all their education in these schools? How can we make the rural schools return larger service to the nation, and particularly to the agricultural communities which support them? How can we increase the loyalty of the rural community to its school? How can we keep the children of the rural communities in school longer, so that they may gain as good an education as that possessed by the town and city children? How can we improve the rural-

school buildings and equipment? How can the rural school help keep the people of the farms from flocking to the towns and cities? How, in short, can we gain the best possible educational opportunities for the one-half of our people who are educated in the rural schools?

It is always important that such questions should be answered, but it is doubly important that they should be

Why we must answer such questions **answered just at the present time.**
For we are advancing. And man, like the old warrior who cast his helmet far ahead into the ranks of the enemy and then fought his way forward to it, always advances by pursuing a flying goal,—some ideal that he sets on ahead as the end of his striving. It is all the more important that we see our way clearly now because we are advancing so rapidly, and mistakes made in our educational policy will handicap coming generations of pupils.

The new movement toward efficiency in the rural schools is but a part of a larger movement affecting all **What is the "new education"?** our schools. It can therefore best be understood by inquiring first, How are we changing our ideal toward the meaning of education in general? What do we mean by the "new education"?

It is characteristic of the present age that nothing is taken for granted. The question, *Why*, confronts us at **Crucial questions asked of education** every turn. Just why should we spend half of all our taxes for the running expenses of our schools? Why should we support nearly twenty millions of our youth while they are employing their time in school? Why should we withdraw over half a million of our best men and women from other occupations and pay them for teaching

school? Why should boys or girls spend eight, twelve or sixteen years of their lives in school, instead of entering on some occupation? What is education, any way, that we should make so much trouble over it? What do we mean by education? What do we mean by the "new education"?

Each term means just what those who use it put into it as meaning. The term *education* has meant vastly different things at different stages of history. In the Middle Ages, education meant very little. It was not thought to have any part in culture, or in preparation for life. It was fit only for the slave or underling, and far beneath the dignity of the merry knights who so gallantly slew one another in joust or battle. Still less was it allowed to mar the charms of the fair ladies of the time. Hence very few of either sex could even read or write, and there was no education worthy of the name.

With the Renaissance, the new birth of learning of the fifteenth century, education came to be looked on with more favor. It was seen to be a part of culture and development, but education was the luxury of the few and not the necessity of the many; hence the masses still plodded on in intellectual darkness. The Reformation brought the demand for a more general education. But education was conceived very narrowly, even by most of the educated. Every man must be able to read his own Bible, but education was thought to play little part in the preparation for the secular affairs of life. And even in establishing our own New England schools, the forerunners of our great public school system, the chief purpose as set forth in the statute was to circum-

vent "that old deluder, Satan," through the religious use of education.

But the meaning of education has gradually been expanding. The rise of democracy and the increased worth placed on the individual have shown us that every person has a right to the full development of his powers as well as the right to "life, liberty, and the pursuit of happiness." Every child, therefore, has the right to an education, and to such an education as will bring out to the fullest degree the capacities inherent in his nature. For these are his life's capital, his inheritance from former generations; they constitute the power he will be able to invest in his career, and measure the efficiency possible for him to attain in all his activities. Not to supply our children with the best opportunities we are able to command for their education is to rob them of their birth-right, and to fall beneath our own ideals for social democracy.

A new meaning is also being given education from another point of view. It is coming to be seen as directly related to *efficiency*. And *efficiency* is the key-note of the twentieth century. Efficiency is the one thing the lack of which is not forgiven in the industrial or professional world, and the possession of which brings the highest success and rewards. It is the open sesame in every line of activity. Industrial workers must be able to turn out a certain amount and grade of the product they work on, or else be crowded out by those who can; the demands are relentless. Great commercial enterprises are built on a foundation of efficiency reaching from the head manager to the lowest employee. Agriculture demands efficiency to a degree undreamed of

a generation ago. When we employ a lawyer or a surgeon, we ask for one thing—efficiency. Explanations and excuses are not accepted as legal tender; nothing but results will be accepted. And the same demand applies in the management of the home. The hygienic care of children, the scientific selection and preparation of food, and intelligent guarding against disease, are a part of the general demand for efficiency applied to the household.

And this new demand for efficiency has helped us to understand the real meaning of education. *Education is Education the road the open road to efficiency.* This is to efficiency the new definition of education,—the meaning that is supplanting all other definitions. Whatever leads to efficiency is education, and what does not lead to efficiency is not education, whatever else it may be. No matter how long the schooling, or how hard the studies, or how great the amount of learning, therefore, these things *must lead to efficiency in the concrete business of living* if they are to be called true education. Professor James tells us that most of us never succeed in calling forth and using all the powers we possess, and estimates that if all the power and ability in men could be brought out and utilized, it would increase the efficiency of the human race by fifty per cent. at one leap. It is the business of education to get hold of this last fifty per cent. of power in our boys and girls and set it at work in increasing their usefulness and success. This is the new education,—education for efficiency.

Nor is the greater efficiency sought through the new ideal for education some theoretical, visionary or in-
Practical meaning tangible thing. It is rather the result of efficiency of harnessing the interests, motives and abilities of the individual, and setting them at work

on the problems and duties lying nearest at hand. It requires that we shall look out on the millions of children entering our schools and see in them the future citizens of our country. Through education, these children are to be so trained that they shall not only have the *knowledge* necessary to citizenship, but also the patriotism, and the impulse to unselfish service necessary to efficient citizenship in a republic. Education must eliminate the three great foes of democracy—ignorance, selfish greed and low ethical standards. We shall also see in these children the future makers of the homes of our land, and through education give them the training necessary to the coming fathers and mothers of our race. We shall fit the men to be able to support the home in economic independence, and fit the women to manage and care for the home and to be the true guides, comrades and teachers of the children. Likewise, we shall see in the rising generation the future members of the community, church and all other social institutions, and seek so to educate them that they may in these relations live the fullest lives possible for themselves, and render the largest possible service to others.

Nor does the new ideal for education omit the vocation. For all our welfare, happiness and progress rest finally on a foundation of labor. Man was made to work. In fruitful labor he not only finds his greatest satisfaction, but also his largest development and achievement. Every person must therefore be fitted into some useful vocation, and made an efficient worker. Education has long neglected the worker. It has been coveted for the culture and training that it gives, and has been recognized as a necessary part of the equipment of the professional man.

But it is only recently that the education of the industrial worker has been realized as essential. The new education sees its responsibility in preparing every worker, no matter what is to be his vocation, for the highest degree of efficiency in his chosen line.

We are therefore coming to recognize the necessity for training the hand as well as the head. Towns and cities **Rise of vocational education** are establishing trade schools either in connection with the high schools, or else as separate institutions. Almost every field of industry is now represented in the schools of some of our larger cities, though we are still far behind the schools of Europe in these lines. Agriculture is coming to be a part of the regular course in a large proportion of the schools of our towns and cities. Courses in domestic science will soon be almost as common as those in science and mathematics. And the rural schools have also felt the effects of the new movement, and are introducing studies relating to the life and work of the farm.

Everywhere, through education, we are seeking to open the road to concrete efficiency in the actual affairs of life. Hence it is that *education* is coming to take on a new and more vital meaning than it has ever before had, and people of all classes are seeking its advantages in ever increasing numbers.

The new ideal in education is also increasing the amount of training sought by those who see in education **An increased amount of education demanded** the road to efficiency. The amount of schooling received by the American child is still far too little, being slightly less than three full years; but this period is rapidly lengthening. Every grade and type of school is feeling the new impulse to a more extended and complete edu-

tion. The proportion of children entering the primary grade who go on through the higher grades to the end of the elementary school is constantly growing. The attendance in the high schools is steadily increasing in proportion to our population; and the number who continue through the college or the technical school is becoming larger. Our people, long believing in education as a matter of theory, are coming to believe in it as a matter of practical fact, and are willing to invest time, money and effort in order to gain its advantages.

The rural school has felt the effects of the new stimulus and is retaining an increasing proportion of its pupils
Effects upon the rural school to complete the eight grades of its course, thus preparing them for the high school. Rural-school graduation is coming to be a regular feature of the work among the country schools, and especially in rural districts where rural high schools are also available. It is true that this advance among the rural schools has as yet touched only a pitiful fraction of the whole number, and that the rural child of the present day is receiving only a small part of the education that is his by right. To increase the amount of education received by the farm child is one of the most important of our educational problems of the present day.

But perhaps the efficiency ideal for education has had the most marked effect of all on the *curriculum*,—what is given the child to study in order to prepare him for his life activity. When education was looked on as a matter of mere culture, or of discipline of the mind, it did not matter so much what was studied. But, since we have come to see that education is directly and immediately related to success in the concrete affairs of life, it

has become evident that the school must present such matter for the child to study as will give him the training needed in these concrete affairs. We are no longer satisfied therefore with the bare rudiments of education, nor with an empty culture that does not relate itself to the daily life.

Under the newer ideal for education we are coming to see that mental discipline is directly related to the amount **Practical subjects** of interest and effort which the pupil **winning place** himself puts into study, and that it has no meaning except as it applies to the actual affairs in which he sets his powers at work. The recognition of this principle is resulting in the remodeling of our school curriculum in the direction of supplanting the old formal, dry and theoretical disciplinary studies with practical, concrete and interesting subjects fitting immediately into the life and experience of the learner. In the high schools, Greek and Latin are giving way to the study of the mother-tongue, the material and social sciences, and the handicrafts. History is no longer being taught as a succession of dates interspersed with descriptions of political intrigues and military campaigns, but as an account of the life and development of a real people and their institutions. Literature is losing its mechanical and critical method, and is being taught more with reference to its beauty and the development of a love for good reading. Even the material sciences are feeling the impulse of the new efficiency ideal in education, and the old formal courses of abstract laws and interminable classifications are giving way to practical phases of concrete physics, applied chemistry, agricultural botany, and practical physiology and hygiene.

In the leading rural schools the changes are no less marked. The empty drill over senseless arithmetical tangles never to be met in actual life, the barren lessons on the niceties of grammatical analysis and linguistic inflections, and the useless and deadening crowding of the memory with useless facts, dates, events and places never called for in affairs outside the school have no place in the new education. They do not lead to efficiency, hence are being supplanted with studies that immediately appeal to the interest and enthusiasm of the pupils, and directly relate to the life and work of the farm. The "three R's" are as well taught as ever,—indeed they are better taught, for there is interest and life in the school. But in addition, the children study the farm crops, the farm stock, the farm home and many other things that open the road to efficiency in their life and work. The influence of the changes toward a more practical and interesting curriculum can hardly be overestimated.

The new education calls for efficiency in *teaching*. It is evident that we can not get efficiency out of education unless we put efficiency into it. In the older day, the vocation of the teacher was looked on with contempt, and the teacher was not regarded with esteem in the community. Horace Mann tells of visiting a school in a miserable cottage where a number of children were crowded together without any occupation. He inquired of the master, a withered old man who lay on a bed in the corner of the room, "Are you the schoolmaster?" "Yes, sir." "And what do you teach?" "Nothing, sir." "How is that?" "Because I know nothing." "Why were you appointed?"

"Why, sir, I had been taking care of the pigs for many years, but getting too old and infirm for that, they sent me here to take care of the children."

But we are coming to see in this day that teaching is a matter of supreme importance. The teacher is one of the most important factors in our civilization, either leading our children to efficiency, or else leaving them stranded in incompetence from lack of education. The teacher confronts a threefold problem, whose magnitude is almost appalling. He must know thoroughly the subject-matter that he is to teach, and in addition, a wide range of information outside his immediate subjects, so that he may have background and perspective for his teaching. He must know the nature and mode of development of the child, his interests, ambitions, problems and temptations, as well as his intellect. And the teacher must also know the running of the school; a machine so intricate and complex that its mastery is no simple problem. The teacher will, therefore, occupy a new position of dignity and power in the new education. He must be adequately prepared for his work, and will receive correspondingly greater rewards, both in honor and in financial compensation.

FOR TEACHERS' DISCUSSION AND STUDY

1. Has our advance in education kept pace with our industrial progress during the last twenty years? What are the dangers of allowing education to fall behind? (Political, social, economic, personal.)
2. What evidences are there in the schools themselves that a new movement in education is getting under way? (Point of view, organization, curriculum, teaching.)

3. How much influence can teachers really have toward stimulating or directing educational reform? Upon what factors does the extent of the teacher's influence depend?

4. Without reference to former definitions that you may have learned, what is your definition of education? Stating the same question differently, what are the tests or measures of an educated person? How does this differ from the older point of view?

5. Measured by any standard course of study now in use, what amount of education do the boys and girls fourteen to eighteen years of age in your township possess? (It would be highly instructive to make a careful survey of the youth of your township with a view to answering this question statistically. If such study were carried out for an entire county, it would be still more interesting.)

6. What rural-school subjects most need revision to bring them closer to the life of the pupils? Do we spend too much time on arithmetic? (Is mere *number* so important that its study should claim nearly one-fourth of the elementary school's time for eight years? Do we spend too much time on grammar? Does a child attain *facility* in the use of language through the study of technical grammar?)

7. What is the social status of the teacher? Do teachers rank with business or professional men in their standing in the community? If there is a difference, what are the causes?

8. What are the different forces now actually at work in reshaping the school and curriculum? (Tradition, teachers and organizations, social demand.) Estimate the relative importance of each of these forces.

CHAPTER XXIX

THE PROMISING FUTURE

In spite of its many shortcomings rural education has a promising future. For the neglect of rural schools Future of rural ed- can not long continue under the new ucation promising ideals that are coming to dominate in country life. The farmer and his problems are now a center of public interest. Every force in the nation stands ready to cooperate in order that the great fundamental industry upon which every other industry depends may be a success. Large numbers of citizens are awake to the necessity of redirecting many of the rural activities, and especially the rural schools. A great bankers' convention recently discussed rural education. Trade journals are devoting much space to the consideration of rural problems, and business men are everywhere concerned for the advancement of rural schools. Manufacturers and captains of industry are studying the rural problem as carefully as the problems of their own organizations. Learned and religious bodies throughout the land are earnestly striving to understand and assist in the betterment of rural conditions.

But most significant of all are the many signs that the rural people themselves are beginning to reach out for the great opportunities they have not yet utilized. Farmers are coming to see that their farms can be made to pay much larger profits for the labor expended on them,

and at the same time yield a greater return in food and supplies for the waiting millions. And they are likewise awakening to the obligation they owe their children in preparing them for a successful career.

All these conditions emphasize the importance of rural education; for education is, after all, the only means by which the reconstruction of rural conditions can be brought about. The rural school is the crucial factor in the situation involving the advancement of agriculture and the future of rural life. As goes the rural school for the next generation, so in large measure will go the whole trend of agricultural interests. The schools are the most natural and efficient agency by which the information and new ideals affecting rural life can be introduced into the rural communities. Corn clubs, dairy trains and farmers' institutes are all praiseworthy and important factors, but these reach only a part of the farming population. The rural school reaches them all, or at least can easily reach them all when it is fulfilling its mission.

So fully is this fact realized that the rural school is coming to occupy the center of educational interest and attention throughout the nation. The federal government is encouraging rural education in very practical ways; the bureau of agriculture is making the rural-school problem an important feature of its work; the bureau of education is constantly studying the rural-school question, and publishing much material bearing on its problems. State legislatures are seeking to provide for the future of rural education; there is not a state in the union whose last legislature did not seriously discuss measures favorable to the rural schools, and most

of them passed laws which will have far-reaching results.

The recent laws have taken many directions, among which are increased levies of taxes for the support of **Recent legislation** the common schools; requirements **promoting rural education** for the better preparation of rural teachers; the payment of higher salaries; the promotion of the teaching of agriculture and the industrial arts in the rural schools; state aid for the consolidation of rural schools; better laws for the transportation of pupils to consolidated schools; provisions for the establishment of experimental gardens for the teaching of agriculture; the betterment of rural school buildings; the providing of playgrounds; instruction of rural teachers in hygiene by competent medical authorities; the extension of compulsory education laws; the lengthening of the rural-school year; the establishment of rural-school libraries; providing better supervision for rural teaching; the extension of high-school privileges among rural pupils; better facilities for the training of rural teachers; the establishment of rural high schools.

These conditions all indicate that the sordid crust of indifference is beginning to give way; the ground-swell

Farmers awaking to opportunity of rural schools of a great movement for the reclamation of the rural school is being felt. The conviction is rapidly gaining headway that the old type of rural school is a poor investment, and that no better investment can be made than rural schools of the right type. Farmers themselves are beginning to realize that in the poor and inefficient district school lies one of the most fruitful causes of the deterioration of the rural community which they so loudly decry. They are coming to see that if the better

families are to be kept from deserting the farms for the town, they must be supplied with an opportunity to educate their children well in the country. And it is becoming clear that we can not keep ambitious boys and girls on the farm by lecturing to them on the beauties of country life and the dangers of the city, while at the same time we do not supply them the opportunities they crave and need for their own development. The real function of the rural school is therefore passing out of the realm of doubtful theory, and becoming a matter of a concrete business and social investment; in place of being considered a drain on the public purse, it is being increasingly conceived as the most promising instrument for the furthering of all rural interests.

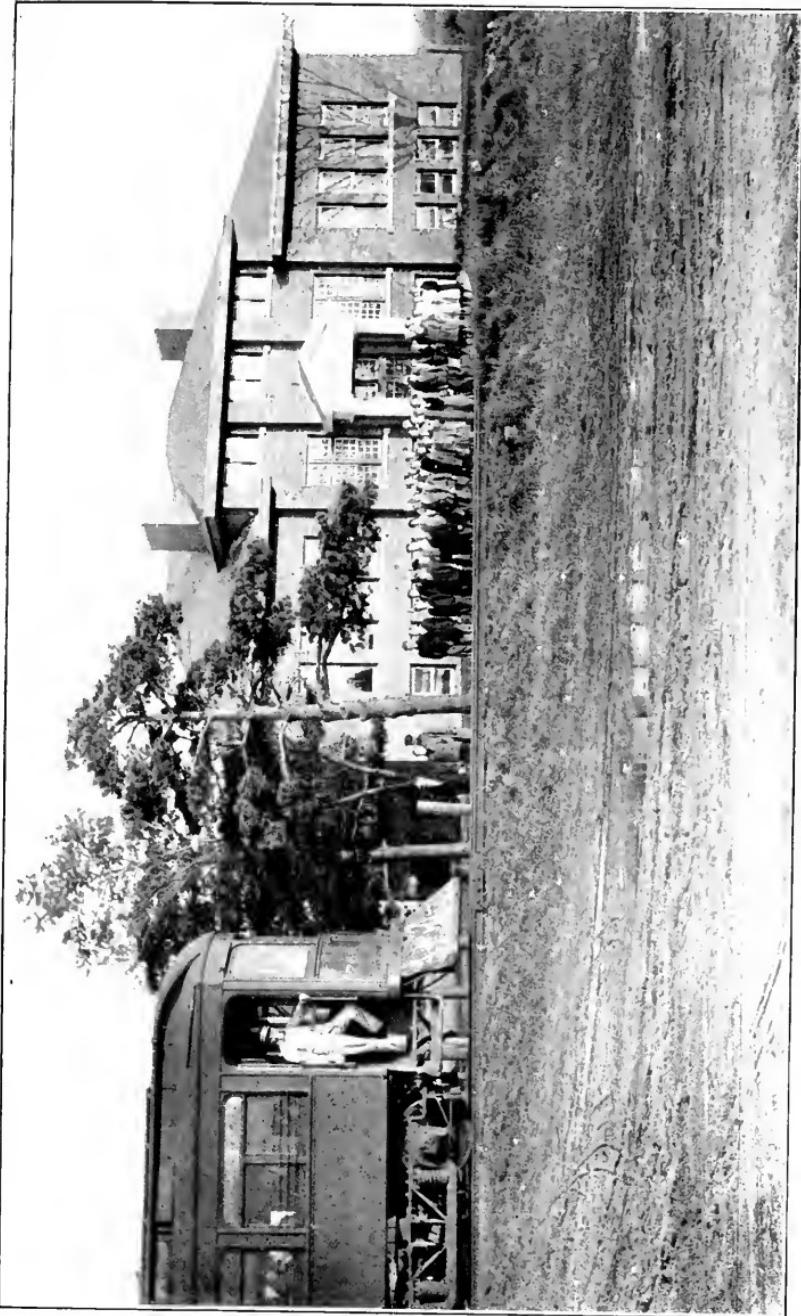
Not only is it wholly evident that rural children must be given a better and more comprehensive education than **Education for farm
must be had in
rural schools** they have been receiving, but it is also clear that this training must be supplied in rural schools, and not be entrusted to the schools of the towns and cities. The school for the education of the children of the farm must radiate the spirit of country life—it must itself *be* country life. This does *not* mean that all who are born on the farm must remain farmers, regardless of fitness or choice; the spirit of democracy demands that all paths shall be left open ahead of every person that he may choose which he will follow. But a very large proportion of those attending the rural schools select the farm as their occupation, and a much larger proportion might be led to do so. It should be the great function of the rural school, then, to educate for a successful career in the vocation most of its constituents will follow.

The rural school of the future must therefore become a dynamic force in the community, attracting boys and girls from the farms, and so fitting into their lives as to show the value of the education it has to offer. It must supply them with the heritage of well-developed powers, and the knowledge and skill required for successful living. It must uplift every phase of rural life, social and industrial as well as intellectual. The rural school of the future can do this; that it has not done it in the past is in large part because it has never conceived its function clearly. That this demand is not too great for the rural school of the future is shown by the fact that hundreds of schools are now carrying out this splendid program of rich service for their communities. These better schools are scattered here and there in many states, each standing as an example, and pointing the way for others. The seed has been planted, and it is beginning to bear fruit.

This high ideal for the rural school means a reversal of our system of education in rural communities. We have been running our educational machinery backward. Instead of preparing for agricultural pursuits, the rural schools have been so organized that they have selected out and prepared a favored few for the town high school. The many have been left to fall by the wayside somewhere from the third to the fifth grade, because of the dry and formal curriculum, the poor teaching and the uninviting surroundings. Those who finally have reached the town high school are probably the best and the most ambitious of the country product. The high school has taken this choice material and fitted it for the college. The college again has received the best of the high-school

product, and prepared it for a professional or a business career; few or none have returned to the farms. Thus our rural schools, in so far as they have had any conscious aim, have served as feeders to the schools that from their very nature have drawn people away from the farm, and contributed nothing directly to it. The rural school of the future must reverse this harmful process; it must so relate its spirit and work to the life and vocation of agriculture that the country shall not constantly be robbed of its best material for the furtherance of the occupations of the city.

The typical rural education of the future will for the most part be conducted in consolidated schools, possibly **Consolidated school to be the typical rural school** consisting in many cases of groups of suitable buildings, instead of one large building. The one-room school will more and more suffer from comparison with consolidated schools, and will come to be looked on as a temporary expedient, ready to give way at the earliest possible moment to the more efficient central school. Country roads will be constantly improved and the children will be conveyed at public expense to the consolidated schools. Surrounding these schools will be ample grounds, consisting of a number of acres, and accommodating a cottage for the head of the school. Every industry carried on in the district will find some place in the curriculum of the school, either for the young, or for the older ones who will also use the school as a means for self-improvement and advancement. The school will be so closely related to the life of the community that every kitchen, barn, dairy and farm will be in some sense a laboratory for the school. The growing crops, the fruits of the orchards and gardens, and the domestic animals of the



Transportation by trolley

farm will all furnish material for study and the application of lessons taught in the school.

One of the chief concerns of the rural school of the future will be the health of the children and the community. With the help of medical inspection and expert assistance sent by the colleges, universities and normal schools to assist in the country-life problem, we shall seek out and aim to remedy the local cause of ill-health in the neighborhood. The tragic loss of life, the useless sacrifice of health, and its accompanying burden of sorrow will no longer be tamely tolerated. How to live long, happily and efficiently will constitute one of the chief lessons of the school. The rural school will offer definite instruction on the question of the daily supply of food as it is raised, prepared and appetizingly cooked. This will constitute one of the chief problems of instruction for every boy and girl; for with the necessity thrust on us of eating three times a day throughout our life, and of being dependent for our energy, life and intelligence on our food supply, this question becomes one of the most concrete and important in education.

Nor will the rural school neglect the question of our housing. The architecture of the country home, its sanitation from cellar to garret, and the need of cleanliness will all be matters of instruction in the rural school of the future. It will show, both by precept and example, the value of neatness, of taste, and of beauty in the home. Systems of ventilation, of lighting, of heating, and modern devices for cooking and cleaning will be important topics of instruction. The pupils will have an opportunity to study the question of drainage for house and barn, of

Future school to promote good housing

sewerage, of the disposal of waste, and the providing of a pure water supply. Sources of infection in the home from impure water, tubercular milk and the house fly will be thoroughly understood.

The matter of clothing will not be forgotten. A part of the course of the rural school of the future will deal

Dress to receive attention with the nature of fabrics, the mode of their manufacture, the value of coloring stuffs, processes of cleansing and all other questions related to economy and taste in dress. Not only will the children be taught proper standards of dress and what constitutes suitable apparel for various occasions, but every girl will learn how to cut, fit and make with her own hands the ordinary clothing for herself or any member of the family. The hygiene of clothing, and the relation of proper clothing to health and freedom from disease, will be thoroughly understood. A suggestion of the need of such instruction is had from the recent campaign initiated by medical authorities to protect children from the contagion of infantile paralysis through the very simple process of saving them from the bite of infected flies, by the expedient of discouraging the senseless custom of allowing children to go with bare legs and feet exposed. The General Education Board is also waging war against the hookworm disease in the South through teaching the necessity of wearing shoes instead of going barefoot.

The rural school of the future will make a very valuable and concrete contribution to the success of farm-

Rural school of future to aid farming ing. Farm demonstrators of the General Education Board working in the South are obtaining on their demonstration farms in every state about double the yield of



Courtesy of G. I. Christie

Farmers and farmers' boys judging corn at an agricultural short course



Courtesy of G. I. Christie

School children and progressive farmers meeting the Corn Extension Train of Purdue, Indiana

cotton averaged for these states. Similar results are obtained both in the North and the South by the demonstrators for experimentation with corn. The knowledge of these demonstrators with reference to the selection of seed and the cultivation of soils would, if universally applied, fully double each of these great staple crops. It is estimated that \$240,000,000 would be added to the annual profits of cotton alone in the South by this increase. At least as great an increase could be expected in the returns from the corn crop. It is worth noticing that the combined increased profits of these two crops would easily pay the current expenses of the entire public school system of the United States. The knowledge required to effect this result can easily be put into circulation among the farmers by thoroughly teaching it in the rural schools. And even if many of the older generation of farmers are impervious to the new methods presented, the coming generation will reap the benefits.

The rural school of the future will not, however, minister to the economic side of life alone. One of the great-

Rural school to minister to art and recreation est needs in the rural community today is the teaching of the art of recreation. The labor of the farm is too steady and monotonous, and too seldom relieved by intervals of social mingling and recreative play. The rural school can provide for the recreative side of life as well as training for the more serious activities. Some healthy, happy recreation will therefore be a part of every school program. The buildings and school grounds will be equipped as playgrounds and recreation centers calculated to attract not alone the young but the old as well. It is not too much to believe that under the stimulus of

such incentive, the weekly half holiday will become as much an established custom in the country as in the cities. It is true that there will be rush seasons when this ideal will be impossible of realization; but the principle is thoroughly sound and needs to be introduced as a part of the system of rural life, if rural conditions are to be made equally favorable with those of the town.

The rural school of the future will also have for an important part of its work the development of a sense To cultivate the esthetic impulse for the beautiful. The schoolhouses which have been the plague spots of ugliness scattered over our fair land are giving way to attractive, well-equipped buildings set in beautifully arranged grounds. The instruction of the rural school, as well as its example, will show the possibilities of beautifying the home and its surroundings. Pupils taught the principles of landscape gardening and the decoration of their home grounds will use the home place as a laboratory for carrying out the principles presented and exemplified in the school. As a part of the demand of human nature for beauty, music and art will be taught in the rural school, and every rural school will have its musical instruments, its orchestra and various choruses.

Finally, the rural school of the future will constitute a library center for its community. Here will be gathered an adequate supply of the world's best books and appropriate magazines. In addition to works related to

The rural school to become a center the farm and the home, these books will need to cover a wide range of interests; for the farmer and his family must have wider intellectual interests than those that deal only with their vocation. Therefore literature, history, science, art and poetry will be freely represented on

the shelves of the neighborhood library. The standard magazines will find their way regularly to the reading table of the school and thence be distributed to the fire-sides of the neighborhood.

When these conditions have been achieved, the rural school will no longer be obliged to receive relatively uneducated and inexperienced teachers, and break them in for town positions. For the rural school will be fully as desirable a place to teach as the town school, and will pay as high salaries. May we not even hope that the rural school of the future, because of its pleasant surroundings, the concreteness of its work, and the earnestness and responsiveness of its pupils, will be able to obtain the choicest and most able from among all our teachers? Will not the graduates of colleges, universities and agricultural schools seek rural instead of city positions because of the peculiar compensations the country has to offer? Some such redistribution of our teaching force is sure to take place when the rural school is raised to the plane it is destined to occupy.

If all this prophecy for the rural school of the future seems much of a dream, let us pause to realize that it is a dream that must come true; else the rural life of our country is doomed. For all these things are now given freely to the town and city child. He has every advantage we have asked for the country child. There is no reason why the rural boys and girls should not enjoy similar advantages, except that they have never yet had them, and it is hard to break away from old standards and customs.

If it is said that such a future for rural education is impossible because of its cost, it may be answered that

this is a futile and senseless argument. For cost is, after all, relative to returns; and there is no manner of doubt that if twice as much money were invested in rural education as is now done, the additional money, if wisely spent, would be returned to the community in dollars and cents, with a hundredfold of interest added. The farmers could abundantly afford to pay for better schools as a business investment, did they care nothing for the education of their children. It has been estimated by competent authority that the railroads could easily pay for an entire system of excellent rural schools out of the added traffic that would result if these schools were made thoroughly agricultural and industrial; and also that the group of manufacturers selling products used on the farm, or the group of merchants dependent on farm trade could afford to support an efficient system of rural schools for the additional business growing out of the greater prosperity of farmers under such educational conditions.

True, none of these financial interests is likely to undertake the support of the rural schools; nor do we want them to. But the facts go to show that our greatest problem in re-organizing the rural schools is not one of money. Better rural schools are one of the best possible economic investments; and there is always money available for a good investment. Further, the recent tendency toward state aid for rural schools bids fair so to equalize the burden of their support that none need suffer from additional expense. The really great problem now confronting us is a *social problem*—that of arousing the constituency of the rural schools, showing them the opportuni-

ties and possibilities that lie just ahead, and guiding in a wise movement for better conditions. We need to wage a campaign of education for *better rural schools*. Let us next consider some of the means by which these results may be accomplished.

FOR TEACHERS' DISCUSSION AND STUDY

1. What do you feel is the future of the rural schools in your region? Will they develop to match the best of the rural schools described in the text, or remain for a time on a low plane of efficiency? If the latter, what factors are lacking to insure progress?
2. Do you believe that rural education in general can ever be made to approximate or equal town or city education? If not, what will be the ultimate effect on the farming industry?
3. Do you think the chapter overemphasizes the influence of rural education on the country-life movement? What is the country-life movement? What forces are back of it? What is its object? When did it start?
4. What does your state require in the way of medical inspection in schools? Do you think medical inspection is practicable in rural schools? Where is it needed most, in town or country schools?
5. What are the great national agencies now at work seeking to improve the conditions of rural life and education? How much do you know of their work?
6. Would you be able to prove to farmers that more money wisely invested in rural education would yield large financial returns?

CHAPTER XXX

PRESENT OPPORTUNITIES

None can doubt that the movement for better rural schools is well begun, and the outlook for the future full of promise. Yet the present has its pressing duties and opportunities. For no great cause is won in a day, nor are customs and standards that have prevailed for a century dropped in a moment. Great movements and deep-seated reforms never come by chance. They are always produced by adequate causes,—by forces that are consciously set in motion and carefully administered. There is still a great amount of social inertia to overcome, and of ignorance and selfishness to be removed, before rural education will come fully into its own.

Indifference to educational needs and advantages is still the rule in many communities. Prejudice yet obtains in hundreds of districts not only against the consolidation of schools, but against all proposed improvements.

These conditions must be wisely and courageously met. They can not be overcome by fine theories, nor by the **Need of wise action** appointment of educational commissions. The passing of wise laws and adopting of helpful resolutions may be a step in the right direction, but without the winning of the people most concerned, all these things will prove futile and fruitless. The reformation now being sought in rural education will

require hand-to-hand work, and almost a house-to-house canvass to instruct, inform, convince and convert. A doubter must be persuaded here and a skeptic won over there; the stingy man must be stirred into seeing greater value in his children and their future than in his stock and his farm. Now an obstacle will need to be removed from the way of progress, and again enthusiasm will have to be created and maintained. Movements already started must be cherished; projects that advance but slowly must be hastened, steps taken in wrong directions checked, and every phase of the situation watched with the greatest wisdom and care.

This is to say that every agency now interested in the upbuilding of rural life and the better education of rural

All forces needed youth must keep devotedly at work; for the advance has only begun.

There is hardly a stage of the rural-school progress that is not still in its infancy. Except in rare instances, rural schools are yet far behind urban schools, and with the best that can be done, they will remain so in many parts of the country for years to come.

Many discouragements will be met by those seeking to advance rural education. School patrons will still often remain blind to the best interests of themselves and their children. Men who ought to be the most ardent promoters of consolidation and the reorganized curriculum will stand in its way. Those who ought to demand better teachers and offer better pay will do neither. Legislatures that should provide every opportunity for the betterment of the rural schools will now and then fail in their duty. Teachers who, because of their relation to the problem, might be the natural leaders in the new movement will in some instances fail to compre-

hend its significance, and in others will consider it not worth while to employ the efforts required for its promotion. Mistakes that have already been made in the erection of unsuitable buildings or in locating them in wrong positions will have to be rectified. Inadequate curricula will need be enriched and reorganized. Faulty laws bearing on the preparation and compensation of teachers must be repealed and better ones passed in their place. In short, the whole field of rural education needs to be surveyed with the greatest wisdom and care, and some atonement made for past neglect through the rapidity and certainty of future progress.

One of the gravest dangers bearing on rural school reorganization is that many who ought to be leaders in **Dangers from discouragement** the movement will become disheartened and give up the work as hopeless. One superintendent recently confessed that he was discouraged over the outlook for consolidation and had given up all attempts to bring it about. Another admitted that he feared the uncertainty of tenure in his office if he advertised the matter of rural-school improvement, and was hence keeping quiet on the subject. In both of these instances, however, adjoining counties had made splendid progress under the leadership of enthusiastic, wise and daring superintendents. There is no place in the struggle that is now on for faint-heartedness, or lack of faith. The "quitter" is not only a dead load; he is an enemy to progress, for his pessimism is contagious.

A second danger is that other workers who have seen necessary reforms well started in their community may think that all is accomplished and cease their vigilance and activity. This attitude will be sure to mean re-

Dangers from taking success for granted

trogression wherever it obtains. For any social or educational movement, particularly if it is but little understood, must be carefully protected and nurtured until it is well established. Objections must be met, mistakes remedied and new lines of advancement initiated. Misconceptions must be removed, and valid criticisms squarely and honestly answered. For example, where the transportation system in consolidated schools is inadequate, where children are kept too long in the school wagons, or where any other conditions obtain which may rightly be questioned, the matter must be fairly considered and remedies found which will remove the objections. If it is found that such new subjects as agriculture, manual training and domestic science are being so poorly taught as to result in but little value, the problem must be mastered as to how to remove these adverse conditions, and not allow reproach to fall on a worthy system of instruction because of minor difficulties.

If here and there a patron wishes to go back to the old district school and the old curriculum of the "three R's," the reasons for his objections should be conscientiously sought and courteously met. One such man who recently insisted that an abandoned school be reopened, was approached by the county superintendent to know the cause of his hostile attitude. He at first evaded the question, but on pressure finally admitted that it was because he owned a large farm in the vicinity of the abandoned school and feared that its rental value might be reduced by having no school near at hand. He was also frank in saying that were the abandoned school reopened he would not send his own children to the school, but would continue them in a

consolidated school near by. It was not difficult, having this bit of information in hand, to persuade him that his position was untenable, and hence to remove the antagonistic attitude that might have proved a barrier in the way of further progress in his district.

The most potent agency in the promotion of rural-school progress in the future will be the *teachers*, **Teachers the most viding they prove equal to their task, powerful factor** and measure up to their responsibility. The teachers can cause the movement toward the new type of rural education to advance very rapidly, or they can delay it for a generation by their indifference. True it is that progress is sure to come, even if we must wait for another generation of teachers to carry it on, or if we must drop out as inefficient those that refuse to adjust themselves to the new movement and supply their places with more progressive or devoted teachers. But the teachers of the present confront an opportunity and a responsibility never before presented to the rural teacher of this country. For the old standards are passing away and new ideals are arising. The old-time teacher was only required to carry out a simple school procedure established generations before his time. The present-day teacher has pressed on him the responsibility of helping to organize and promote a new movement in rural education.

The teacher is in immediate contact with pupils and patrons, hence is the best medium through which information and suggestions can reach the constituency of the rural schools. He is looked on as a specialist, and his advice is sought and his judgment taken on all educational questions. The teacher's attitude is therefore very largely a determining factor in every project for better-

ing the rural schools. If the teachers are indifferent, it will be hard to interest the patrons. If they are uninformed, it will be difficult to enlighten the people. If they are hostile, the people will hardly be friendly to new policies.

One of the chief factors in the promotion of rural-school progress is *information*. What is desirable and **The public require** possible, the lines of advance actually **information** being carried out in the best rural schools, is the most effective argument with patrons and school officers. In many conservative and backward districts, the rural people are in the main intelligent, but busied with their own affairs and centered on their own interests; they do not know the remarkable progress already achieved in communities outside their own region. What they need is to have this knowledge brought to them in a concrete and an effective manner. They need to have placed before them practical ideals based on actual accomplishment under conditions similar to their own. Faultfinding, adverse criticism and accusations of obstinacy and narrowness are ordinarily not helpful influences; the better method is constructive, helpful criticism in the form of plans and projects already tried and proved feasible.

If teachers are to assume the rôle of directors and leaders of public opinion in their communities, it is evident that they must first of all thoroughly inform themselves on all questions of rural progress and particularly of rural education. They must know what is being done in the leading types of rural schools in other places. They must be familiar with the methods that are being tried, the successes that are being achieved,

**Teachers must
themselves be
informed**

and the difficulties that are being met. If teachers are to serve as leaders, they must realize that the blind can not lead the blind. If they are to promote instruction in agriculture and make it a practical, concrete and helpful factor in the school and the community, they must study the subject and enter fully into its spirit. If they are to teach or oversee the teaching of manual training, they must know the practise of this work. So also if they are to direct in domestic science, they must have mastered its principles and its technique.

Teachers should be well informed on the matter of school buildings and equipment. They should know the **Knowledge of** principles governing the method of school buildings ventilation, heating, lighting and the sanitation of their schoolhouses. This is not because they will ordinarily be responsible for finally proposing or accepting the plans for new school buildings, but because their influence and assistance are required by their superior officers to help shape public sentiment on these questions.

Similarly, teachers should keep in close relation with the new legislation now taking place throughout the **Knowledge of new** country favoring the advancement of legislation rural education, not because teachers will be members of legislatures, but because their influence and advice should be influential in promoting sentiment in their communities looking toward progress through legislative action.

Particularly should teachers be thoroughly informed on the question of consolidation of rural schools. They **Knowledge of** should know its history and its progress to date. They should study the consolidation objections that are to be met and how they are to be

overcome. They should be able to form an accurate estimate of the relative cost of the consolidated and the district school systems in their respective communities. One teacher who had this knowledge was able to show an objecting farmer that his share of additional tax for a new consolidated building would be seventy-two cents a year for the next ten years. It is unnecessary to say that he became a warm advocate of the project. Teachers should know the relation of consolidation to roads and the transportation problem. Again, this knowledge is required, not that teachers may actually propose and carry through the plans for consolidation in their respective communities, but because the county superintendent will require their assistance in shaping the sentiment in their districts for consolidation.

It is evident from these considerations that the teacher occupies a strategic position in the matter of rural-school progress, and that as the teachers take hold of the problem, so largely will its success be measured in the immediate future.

County superintendents and their assistants will in the main have thrust on them the burden of taking the

Importance of county superintendent in rural progress initiative in rural-school progress.

True, state superintendents and other higher officials help to plan and outline various projects, but it remains for the county superintendent to introduce these plans to the people. He must gain their cooperation and organize the forces that shall put the new policies into operation. He and his teachers are the ones to meet the objections at first hand. They are obliged to make a canvass of the rural constituency, and through its influence insure the success of the project or stand respon-

sible for its failure. For none of the projects proposed for the betterment of rural schools can be introduced by so large a unit as a state; forward steps will be by counties, townships and school districts.

County superintendents and all who work under them therefore need to be specialists in rural life and conditions.

**Superintendents
should be rural
specialists**

If they are not such when they assume office, they should make this their special and constant study.

They ought to be professional educators in the highest sense of the term, and possess an exceptional degree of enthusiasm, and a passion for service. They will be required to be preeminently sympathetic and thorough students of the new education, and the many plans now being proposed for the advancement of rural schools. They must be able to judge which of these plans will prove successful under the conditions obtaining in their own counties, and which ones, from the nature of things, would of necessity prove a failure. They can never afford to be faddists; for some wild project recklessly taken up may so lose the confidence of the public as to delay real progress for many years.

On the other hand, the county superintendent must not be indifferent to the movement in rural education which is now gathering headway throughout the nation. Undue conservatism or "fogyism" is fatal to all vital qualities of leadership. This office is no place for the timid nor for those who care more for political position than for measuring up to duty and opportunity. No person who is not willing to stake both his professional reputation and his official position on the most fruitful

projects and promising improvements available has any business seeking or occupying this office.

The state superintendents, with their rural-school supervisors and similar officers, have an unusual opportunity at present and must shoulder a responsibility. They are the natural leaders and commanders of the great army of rural-school workers. They should possess the critical judgment, the enthusiasm, and the technical and scientific knowledge requisite for the successful direction of this army. It is theirs to help plan legislation, to aid in the introduction of new projects in their states, and to unify and secure cooperation from all the agencies working under them. How great the influence of these superior officers is seen in the number of states at present making remarkable progress in rural education under the leadership, stimulus and guidance of these higher officials.

Outside of these regularly constituted educational agencies is another group of powerful factors able to wield a large influence for the upbuilding of rural life and schools.

The press of the country is the greatest single force in molding public sentiment, and its support of any great movement will go far toward insuring its success. The press is becoming interested in the question of rural education; it will become still more interested as the movement for better schools advances. No wiser policy could be pursued than for educators to enlist to the fullest extent the cooperation of the press in spreading information and shaping opinion. Nor is it the metropoli-

tan press alone that should be utilized. Every county newspaper is a source of power for the upbuilding of rural schools; and every such paper is glad to lend its assistance to this end, for its constituency is in the main from among the rural people. County superintendents and rural teachers could make far more use than they do of the local papers of their communities in advancing the campaign for better rural schools. Weekly letters telling of the school activities, noting improvements, speaking of any special lines of work and suggesting needed improvement are sure to be read eagerly, and will do much to interest the community in the school.

Another great influence recently entering into the field of rural education is that of the federal government, ~~Part taken by the~~ through the Bureau of Education and ~~federal government~~ the Bureau of Agriculture. Each of these bureaus maintains specialists in rural education who devote their time to the study of rural educational problems and the distribution of information and suggestions relative to rural schools. The careful researches made by George W. Knorr of the Bureau of Agriculture on the matter of rural school consolidation constituted the first extensive study attempted. His published bulletins have been of the greatest value to all students of rural conditions. The federal Bureau of Education has recently devoted a large amount of time to the study of rural schools and the spreading of information to all rural workers. Many of the bulletins on rural education published during the last few years and freely distributed to all who are interested have been a fruitful guide and source of suggestion to teachers. Monaham's recent monograph on the status of rural education contains much information not available elsewhere. Commissioner

Claxton has, in addition, enlisted the cooperation of many specialists not directly connected with the federal bureau, and his office serves, through its published bulletins, as a clearing-house for educational information coming from these workers. Besides these important lines of work, the bureau is sending out weekly news items and suggestions that are published, hence distributed to millions of readers, thus unifying and directing educational sentiment in a way and on a scale never before attempted.

All these things are a cause for confidence and hope. The day of the rural school is dawning. The cause is great enough to enlist the choicest minds and hearts of the age; it is the cause of six millions of America's most deserving boys and girls. More than this, it is the cause of the whole future of American rural life. It remains with us, the workers of the present, to determine *when* the cause of rural education shall triumph; for triumph it must sooner or later. It is possible for the next decade to see the virtual reorganization of the rural school system if all stand ready to do their part.

FOR TEACHERS' DISCUSSION AND STUDY

1. What are the most pressing things that need now to be done in your community for the upbuilding of the rural schools? Make a list of them and decide how many of them you can personally advance.
2. Do you know of any projects for school improvement that have been defeated by unwise promotion by teacher or official who lacked either tact or information?
3. In how far can teachers prove a factor in influenc-

ing school legislation? In furthering consolidation? In introducing a stronger curriculum?

4. How well are you informed on the rural-school movement and its needs? Will you look over the list of book titles following this chapter and see whether there are not a number that you should read? How would you rate your professional interest?

5. Have you ever tried to use local papers as a means of interesting your community in school affairs? Do your papers welcome such matter in their columns?

6. What, in general, has been the effect of reading this book on your attitude toward rural education and your efficiency in teaching? Will yours be a *better rural school* for the study you have made on the subject?

BIBLIOGRAPHY

BIBLIOGRAPHY

No attempt has been made to offer a complete bibliography on the rural school. Indeed a bibliography that would include all the titles now available on this subject would occupy well-nigh as much space as that required by the entire volume. The student entering on the study of this rich field will, however, find a valuable guide to fundamental material in the titles that follow. It can not be too strongly urged on teachers that they make abundant use of the various bulletins issued: (1) by the United States Department of Agriculture, Washington, D. C.; (2) by the United States Bureau of Education, Washington, D. C.; and (3) by the agricultural colleges, especially the ones of their home states. Nearly all of these bulletins are sent free on request, and the few that are sold usually cost not more than ten cents. These pamphlets are clearly written in untechnical language and put the knowledge of great specialists at the service of teachers. Every teacher should at least write to each of the three sources mentioned, asking for a list of publications for free or paid distribution.

GENERAL REFERENCES ON RURAL LIFE

- BAILEY, L. H.—*The Country Life Movement.* Bailey stands at the head of the movement he so well describes in this excellent volume.
- BAILEY, L. H.—*The Farmer and the State.* Especially valuable as a basis for discussion at farmers' meetings.
- BAILEY, L. H.—*The Training of Farmers.* Treats of the public school and higher institutions in the training of farmers.
- BUTTERFIELD, K. L.—*Chapters in Rural Progress.* Published in 1908, but probably still the best analysis of rural social conditions.
- BUTTERFIELD, K. L.—*The Country Church and the Rural Problem.*
- CARNEY, MABEL—*Country Life and the Country School.* A helpful book, abundantly illustrated.
- CARVER, T. N.—*Principles of Rural Economics.* A strong presentation of the economic problems confronting the agriculturalist.
- — — *Country Life*, report of commission. The government printing office, Washington, D. C. (10c.) This is the most comprehensive and important publication available on rural life and the factors required for its improvement.
- FISKE, W. G.—*The Challenge of the Country.* A helpful work, dealing with rural social, educational and religious conditions.
- MCKEEVER, W. A.—*The Farm Boys and Girls.*

REFERENCES ON THE ORGANIZATION AND WORK OF THE
RURAL SCHOOL

- ALLEN, W. H.—*Civics and Health.* An excellent treatment of the physical basis of citizenship and health.
- AYRES, L. P.—*Open Air Schools.* Shows the effects of fresh air on physical and mental development in school children.
- BAGLEY, W. C.—*School and Class-Room Management.* A good statement of the fundamental principles underlying the management of a school.
- BANCROFT, J. H.—*Games for the Playground, Home and School.* The most valuable collection of games and plays now available for the teacher.
- BETTS, G. H.—*New Ideals in Rural Schools.* A brief comprehensive statement of rural-school conditions and needs.
- BETTS, G. H.—*The Recitation.* Probably the simplest and most helpful discussion of this subject yet published.
- BLAIR, F. G.—*One-Room and Village Schools in Illinois.* Office of State Superintendent, Springfield, Ill. (Circ. No. 65. Free.) Contains much highly suggestive and useful information relative to improving schoolhouses and their equipment.
- BURBANK, L.—*The Training of the Human Plant.* This excellent little book is an attempt to apply the scientific principles underlying his work with plants to the education of the child.

- COCKEFair, E. A.—*A Correlated Course of Study in Agriculture, Geography and Physiology for Rural Schools.* Special Bulletin, State Normal School, Cape Girardeau, Mo. (Free.) Contains sixty-three pages of outlines and discussion.
- COE, G. A.—*Education in Religion and Morals.* A very suggestive and inspiring book dealing with the relation of morals and religion to the broader field of education.
- COLEGROVE, C. P.—*The Teacher and the School.* The text discusses a wide range of topics dealing with organization, administration and teaching of rural schools.
- CONOVER, JAMES P.—*Personality in Education.* This volume shows the important relation of a pleasing and attractive personality to good order, study and class work in the schoolroom.
- CROSBY AND HOWE—*Free Publications of the Department of Agriculture;* classified for teachers. United States Department of Agriculture, Washington, D. C. (Free.) Contains lists on agriculture, domestic science, geography, hygiene, physiology, entomology, etc.
- CUBBERLY, E. P.—*Changing Conceptions of Education.* A brief clear statement of the growth of modern educational ideals in the United States.
- CUBBERLY, E. P.—*Improvement of the Rural Schools.* A brief and forceful discussion of reforms needed to place rural education on a rational basis.
- CURTIS, H. T.—*The Reorganized School Playground.* Bulletin, United States Bureau of Education, Washington, D. C. An excellent discussion with a list of playground apparatus and directions.

- DAVENPORT, E.—*Education for Efficiency.* Deals first with a general discussion of the relation of education to efficiency and then makes special application to agriculture as relating to efficiency.
- DAVIS, B. M.—*Agricultural Education in the Public Schools.* This is not a work on methods, but a discussion showing the various factors at work to promote agricultural education in this country. Treats a field not covered by any other writer.
- ELIOT, C. W.—*Education for Efficiency.* A brief definition of what Ex-president Eliot considers an educated man.
- GULICK AND AYRES—*Medical Inspection of Schools.* Shows the need of medical inspection, its method, and what has been accomplished.
- HOWE, F. W.—*Boys' and Girls' Agricultural Clubs.* United States Department of Agriculture. (Free.) Contains history, plans and development of these clubs up to 1910.
- HYDE, W. D.—*The Teacher's Philosophy In and Out of School.* An enlightening discussion by the president of Bowdoin College.
- JOHNSON, GEO. E.—*Education by Plays and Games.* In a very interesting way this volume shows how important and helpful to good school work is the matter of play.
- KERN, O. J.—*Among Country Schools.* One of the best contributions to rural education.
- KNORR, G. W.—*Consolidated Rural Schools.* Bulletin United States Department of Agriculture, Washington, D. C. (Free.) The most complete and authoritative study of consolidation made up to this time.

- KNORR, G. W.—*A Study of Fifteen Consolidated Schools.* Southern Education Board, Washington, D. C. A detailed account of a tour of inspection made by a group of southern educators to consolidated schools in Indiana, Ohio and Maryland.
- LEIPER, M. A.—*Teaching Language Through Agriculture and Domestic Science.* Bulletin, United States Bureau of Education, Washington, D. C. (Free.) Contains detailed syllabi and outlines.
- MONAHAN, A. C.—*The Status of Rural Education in the United States.* Bulletin (1913), United States Bureau of Education, Washington, D. C. (Free.) A brief excellent summary of actual rural school conditions throughout the country.
- O'SHEA, M. V.—*Everyday Problems in Teaching.* A concrete, practical, helpful book.
- PALMER, G. H.—*The Ideal Teacher.* An inspiring discussion by one of America's most famous teachers.
- PARKER, S. C.—*History of Modern Elementary Education.* Deals with the whole range of elementary education, but especially emphasizes the curriculum.
- REAVES, W. P.—*The Conservation of the Health, Teeth, Voice, Hearing and Sight.* Privately printed, Greensboro, N. C. An excellent booklet, illustrated.
- RUSSELL SAGE FOUNDATION, THE—*A Comparative Study of the Public School Systems in the Forty-eight States.* (1915c.) Russell Sage Foundation, New York. An excellent statistical study, fully illustrated with charts.
- SEERLEY, H. H.—*The Country School.* A large range of topics is discussed.

SLATTERY, M.—*Living Teachers.* A booklet full of inspiration and helpfulness.

STATE SUPERINTENDENTS OF PUBLIC INSTRUCTION—*Bulletins on Consolidation or Other Rural School Improvement.* (Free.) Address at various state capitals. Especially good bulletins of recent date are those from Washington, Wisconsin, North Carolina, South Carolina, West Virginia, Oklahoma, Louisiana, Minnesota, Alabama, Mississippi, Kentucky, North Dakota, Kansas, Illinois; also Superintendent O. J. Kern's annual reports, Winnebago County, Illinois.

TERMAN, L. M.—*The Teacher's Health.* Gives actual facts and statistics as to the health of teachers. Also suggestions for conservation of health.

WARREN, J. E.—*Agricultural Projects for Elementary Schools.* Massachusetts Board of Education, Boston. (Free.) This manual is prepared as a guide for teachers and superintendents in the introduction of agriculture into elementary schools by use of the home project method.

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